Shikshan Prasarak Mandal, Kamptee's

Seth Kesarimal Porwal College of Arts & Science & Commerce, Kamptee – 441 001

Affiliated to RTM Nagpur University, Nagpur, Maharashtra NAAC Accredited with 'B^{++}' Grade

Website: www.porwalcollege.in E-mail : iqac.skpc@gmail.com; principal @skpckamptee.org

Internal Quality Assurance Cell (IQAC)

Dr. V. N. Chavan
Principal

Dr. R.A.Tiwari
Co-ordinator

Date :

Session 2023 – 2024

Criterion 1–Curricular Aspects

1.2 Academic Flexibility

1.2.1 **Number of Programmes in which Choice Based Credit System (CBCS)/ elective Course system has been implemented**

INDEX OF DOCUMENTS

1. **Direction for Choice Based Credit System (CBCS) B.A.**
2. **Direction for Choice Based Credit System (CBCS) B.Com.**
3. **Direction for Choice Based Credit System (CBCS) B.Sc.**
4. **Direction for Choice Based Credit System (CBCS) M.Sc.**
5. **Direction for M.A. CBCS (M.A. Sociology & Economics)**
6. **Direction for Choice Based Credit System (CBCS) M.Com.**
7. **Direction for Admission and Examination**
8. **Direction for Conduct of Semester(CBCS) Examination**

IQAC Coordinator
Co- ordinator
IQAC
Seth Kesarimal Porwal College
of Arts & Science & Commerce
Kamptee

SETH KESARIMAL PORWAL COLLEGE S.K.P. KAMPTEE

Principal

Principal
S.K. Porwal College
Kamptee

RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY
Established by Government of Central Provinces Education Department by Notification No. 513 dated the 1st of August, 1923 & presently a State University governed by Maharashtra Public Universities Act, 2016 (Mah. Act No. VI of 2017)

Direction No. 44 of 2023

ADMISSIONS AND EXAMINATION LEADING TO THE DEGREE OF MASTER OF SCIENCE (AS PER NEP 2020) EXAMINATION UNDER FACULTY OF SCIENCE AND TECHNOLOGY, DIRECTION, 2023.

Whereas, The Maharashtra Public Universities Act, 2016 (VI of 2017) has come into force from 1st March 2017;

AND

Whereas, Rashtrasant Tukadoji Maharaj Nagpur University (hereinafter "the University") is now being governed by The Maharashtra Public Universities Act, 2016 (VI of 2017) (hereinafter the Act);

AND

Whereas, in the meetings of all Boards of Studies under the Faculty of Science and Technology it is resolved to restructure all the post graduate programmes of the faculty in tune with National Education Policy 2020, including the change in the nomenclature of the programmes. All the Boards of Studies have submitted the draft scheme of examinations, syllabus and other details of these programmes including On Job Training (OJT)/ Field Project (FP), Research Methodology (RM) and Research Projects (RP) to be introduced in the various Semester of the restructured programmes;

AND

Whereas, the draft scheme of examinations, syllabus and other details of these programmes prepared by the respective Board of Studies is approved by the members of the Faculty of Science and Technology in its meeting dated 5th August 2023. On behalf of the Academic Council, Vice Chancellor has accepted the draft submitted by the members of the Faculty of Science and Technology and the Notification to that effect was issued on 14th August 2023;

AND

Whereas, the difference post graduates programs in science (Master of Science) are till date governed thorough different Ordinances and Directions, in order to bring uniformity in the process of admission, ATKT, Scheme of examination, all the board of studies in these subjects have agreed to have a uniform direction/ordinance governing all the master of science programs in the

University

AND

Whereas, as per the National Education Policy 2020 and the gazette of the nomenclature of programmes published by the University Grants Commission in 2014, the nomenclature and scheme of examination and other details of the erstwhile degrees of Master in Cosmetic Technology, Master in Fashion Design, Master in Textile Design, Master in Textile and Clothing, Master in Hospitality Management, Master in Human Development and Master in Extension Education are now changed to Master of Science in Cosmetic Technology, Master of Science in Fashion Design, Master of Science in Textile Design, Master of Science in Textile and Clothing, Master of Science in Hospitality Management, Master of Science in Human Development and Master of Science in Extension Education with the approval of competent authorities of RTMNU.

AND

Whereas, Ordinance is required to be framed for the governance of Admissions and Examinations in any program but it takes time to frame an Ordinance and there is an urgency to bring into effect the changes in the Master of Science Programs;

Now, therefore being satisfied with the nature of emergency, I, Dr. Subhash R. Chaudhari, Vice-Chancellor, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur in exercise of the powers vested in me under Section 12(8) of the Maharashtra Public Universities Act, 2016 do hereby issue the following direction:

1. This direction shall be called "DIRECTION GOVERNING THE EXAMINATION LEADING TO THE DEGREE OF MASTER OF SCIENCE (AS PER NEP 2020) EXAMINATION UNDER THE FACULTY OF SCIENCE AND TECHNOLOGY, RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY NAGPUR".
2. This Direction shall come into force from the academic session 2023-24.
3. **Interpretation Clause:** In this direction, unless the context requires otherwise the words, phrases and abbreviations used shall have the following meaning:
   a. **"Academic Council"** means Academic Council of R.T.M. Nagpur University.
   b. **"ATKT"** means allowed to keep term in higher semester.
   c. **"Board of Studies"** means Board of Studies for various subjects of Science in the faculty of Science and Technology in the University.
   d. **"CC"** means Core Course
   e. **"CIE"** means Continuous Internal Evaluation which refers to the Internal Assessment done at college/institute level.
   f. **"Competent Authority"** (for admission purpose) means an "Authority" established or assigned the duty to regulate admissions in the course by the Government of Maharashtra or an authority constituted by the University, for this purpose.
   g. **"Credit Point"** (G) It is the product of grade point and number of credits for a course.
   h. **"Credit"** (C) A unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching (lecture or tutorial) or two hours of practical work/field work per week.
   i. **"Course"** means a paper/subject (theory or practical) prescribed for any semester of the programme.
   j. **"Cumulative Grade Point Average (CGPA)"** It is a measure of overall cumulative performance of a student over all semesters (four semesters). The CGPA is the ratio of total credit points secured by a student in various courses in all semesters and the sum of the total credits of all courses in all the semesters. It is expressed up to two decimal places.
   k. **"DSE"** means Discipline Specific Elective Course

9	Environmental Science	A candidate should have opted Environmental Science as one of the subjects at B.Sc. Examination or B.Sc. (Agriculture Science) having Environmental Science as one subject.	ES
10	Geology	A candidate should have opted Geology as one of the subjects at B.Sc. Examination.	GE
11	Forensic Science	A candidate shall have B.Sc. Forensic Science (Degree with all optional papers related to different disciplines of Forensic Science).	FS
12	Electronics	A candidate should have opted Electronics as one of the subjects at B.Sc. Examination or B.Sc. Electronics with Computer Maintenance as one subject.	EN
13	Computer Science	A candidate should have opted Computer Science as one of the optional subjects at B.Sc. or B.Sc. with optional subject as Computer Maintenance/ B.Sc. (Computer Science)/ B.Sc. (Information Technology)/ Bachelor of Computer Application (BCA)/B.Sc. (Data Science) or B.Sc./BE/BTech with Post B.Sc. Diploma course in Computer Science & Application of RTMNU.	CS
14	Information Technology	A candidate should have opted Information Technology as one of the optional subjects at B.Sc. or B.Sc. with optional subject as Computer Maintenance/ B.Sc. (Information Technology)/B.Sc. (Computer Science)/ Bachelor of Computer Application (BCA)/ B.Sc. (Data Science) or B.Sc./BE/BTech with Post B.Sc. Diploma course in Computer Science & Application of RTMNU.	IT
15	Fashion Design	A Candidate should have passed Bachelor/B.Sc. in Fashion Design or B.Sc. (Home Science/Garment Technology) or B.A. in Fashion Design or Batchelor in Khadi Production Design or Batchelor in Fashion Business Management or B.Voc. in Fashion Design or BFA/MFA/M.A. (Home Economics) or Graduation in Textile Science/Textile Design/Handloom Technology/Fashion Accessories/Apparel Merchandising or any graduate with one/two year Diploma or Certificate course in Fashion Design/Garment Technology/Fashion Technology, Dress Designing or Dress Making relevant experience in Fashion Design.	FD
16	Textile Design	A Candidate should have passed Bachelor/B.Sc. in Textile Design/Textile Science/Home Science/Textile or Handloom Technology or BE/BTech in Textile Technology or B. Design/Graduation in Textile, Knitwear or Fashion.	TS
18	Cosmetic Tech.	A Candidate should have passed Bachelor/B.Sc. in Cosmetic Technology (four-year degree).	CT
19	Hospitality Management	Four Year Degree in Hospitality Management/Hotel Management & Catering Technology/Hotel Management/Hospitality Studies or three-year degree in Hospitality Management/Hotel Management & Catering Technology/Hotel Management/Hospitality Studies with one-year relevant experience.	HM
20	Textile & Clothing	A candidate should have B.Sc. (Home Science) or Bachelor/B.Sc. in Textile Design/Fashion Design/Textile Science or Textile Degree course, and any other Fashion Technology and Textile degree course of the university.	TC
21	Human Development	A candidate should have B.Sc. (Home Science) or B.A. or M.A. (Home Economics/Psychology) or BSW/M.S.W. or MBBS or B.A. with additional Psychology. Or P.G. Diploma in Early Childhood Education.	HD
22	Extension Education	A candidate should have B.Sc. (Home Science/Agriculture), or M.A. (Home Economics) or B.S.W. or B.A. (Rural Services), or Post Graduate Diploma in Mass Communication or Bachelor of Veterinary Science.	EE
NOTES:			

l. **"Degree"** means the Post Graduate Degree awarded after successful completion of the programme governed by this Direction.

m. **"Fees"** means the fees prescribed by the University/Shikshan Shulka Samiti of Government of Maharashtra, for the Post Graduate Programme under this Direction, from time to time.

n. **"Grade Letter"** is an index of the performance of students in a said course. Grades are denoted by letters O, A+, A, B+, B, C, P and F.

o. **"Grade Point"** It is a numerical weight allotted to each letter grade on a 10-point scale.

p. **"Master Programme"** means Master degree programme in science.

q. **"MOOC"** means Massive Open Online Course offered by SWAYAM/NPTEL or any other recognized University or institution or Platform.

r. **"SEC"** means Skill Enhancement Course.

s. **"Semester Grade Point Average (SGPA)"** It is a measure of performance of work done in a semester. It is ratio of total credit points secured by a student in various courses registered in a semester and the total course credits taken during that semester. It shall be expressed up to two decimal places.

t. **"Student"** means student admitted to Master's degree programme in Science under this direction.

u. **"ODL"** means Online Distance Learning

v. **"University"** means Rashtrasant Tukadoji Maharaj Nagpur University.

4. **Details of eligibility for M.Sc. Semester - I Examination**

Subject to the compliance with the provisions of the Direction and other Ordinances in force from time to time, the following applicants shall be eligible for the admission to Master of Science and Examination thereof.

Applicants who have passed the Examination (as mentioned in table 1) of Rashtrasant Tukadoji Maharaj Nagpur University (RTMNU) or any statutory University in India or abroad recognized by University Grants Commission (UGC) or any other relevant apex regulatory authority or body of India an Examination recognized as equivalent thereto, are eligible for admission to the M.Sc. Semester – I programs for their examination, provided applicant has secured an aggregate of not less than 45% marks at the B.Sc. Examination. A relaxation of 5% in aggregate marks will be given to the students belonging to the reserved category.

Table 1: M. Sc. Programs

SN	'Major' to be offered	Eligibility for admission to Semester - I	Code
1	Chemistry	A candidate should have opted Chemistry/ Industrial Chemistry as one of the subjects at B.Sc. Examination.	CH
2	Physics	A candidate should have opted Physics as one of the subjects at B.Sc. Examination.	PH
3	Mathematics	A candidate should have opted Mathematics as one of the subjects at B.Sc. Examination.	MT
4	Zoology	A candidate should have opted Zoology as one of the subjects at B.Sc. Examination.	ZO
5	Botany	A candidate should have opted Botany as one of the subjects at B.Sc. Examination/B.Sc. (Agriculture) with Botany as one of the subjects.	BO
6	Biochemistry	A candidate should have opted Biochemistry as one of the subjects at B.Sc. Examination.	BC
7	Microbiology	A candidate should have opted Microbiology/ Biotechnology as one of the subjects at B.Sc. Examination.	MI
8	Biotechnology	A candidate shall be any Life-Science graduate or Agriculture or Veterinary or Fishery Science or Pharmacy or B.Tech./BE Biotechnology or MBBS or BDS graduate.	BT

- The COLLEGE may offer a particular 'Major' subject depending on the availability of students and teachers.

The COLLEGE is not expected to force any student to opt for a particular subject where a choice is provided in the scheme of examination.

5. **Duration of the Program, student progression path and provisions for Multiple Entry and Exit**
   a. Duration of the M. Sc. Program shall be TWO years with the provision for multiple exit as mentioned here:
      i. A student can exit the program after successful completion of 1st and 2nd semesters having earned requisite number of credits as mentioned in the scheme of examination. Such a student shall be eligible for the award of 'Post Graduate Diploma in Science' with a major by the University.

      OR

      a student can continue the program in 2nd year in order to become eligible for the award of 'Master of Science' degree with a major subject by the university.
   b. Re-entry or Lateral Entry
      i. Students, opting for exits at any level, will have the option to re-enter the programme from where they have left off, in the same or in a different higher education institution will be permissible up to 5 years from the date of admission to PG program.

      ii. Re-entry at various levels for lateral entrants in academic programmes shall be based on the earned and valid credits as deposited and accumulated in the Academic Bank of Credits (ABC) through Registered Higher Education Institutions and proficiency test records.

Table 2: Eligibility for Award of PG Diploma/Degree

Semester Completion	No. of Minimum Credits Required	Additional Credit Requirement	Eligible For
I and II	40	Nil	Post Graduate Diploma in Science with Major
III and IV	82	Nil	Master of Science Degree with Major

6. **Selection of 'Major' Subject**
   A student admitted to this program is required to select any one of the subjects/programs (Refer Table 1) as 'Major' subject to the availability of a particular subject in a particular college and is required to undergo and successfully complete the 'Core' and 'Elective' courses as mentioned in the scheme of examination of the selected 'Major' subject.

7. **Availability of 'Major' and 'Intake Capacity'**
   All colleges affiliated to the University for offering **Master of Science (M. Sc.)** Program/s in the Faculty of Science and Technology shall have their intake as approved by RTM Nagpur University. The available Major programs for M.Sc. are listed in Table 1 above.

8. All colleges affiliated to the University offering M. Sc. Program are required to put up a list of 'Major' subjects it is offering on the Notice Board as well as on the website of the college to make students aware about the availability of subjects. Moreover, colleges are expected to define and display the 'Standard Operating Procedures' for the college faculty members and students to facilitate the process of selecting 'Major' subjects.

9. In pursuance with the National Education Policy 2020 and a Government Resolution No. NEP-2022/प्र.क्र.09/विशी-3/विभाग dated 16th May 2023 issued by the Government of Maharashtra, the credit framework for M. Sc.. Program shall be as mentioned in **Annexure – I.**

10. **Teaching and Examination Scheme**

Teaching and Examination Schemes for all available 'Major' subjects for Master of Science (M. Sc.) degree are appended in **Annexure – II.**

11. **Evaluation Scheme for OJT/FP/ and RP**

A student of M. Sc. Semester – II has to compulsorily undergo 'On Job Training'. Similarly, a student of M. Sc. Semester – III and IV is required to undertake a 'Research Project'. Scope of these courses and their detailed evaluation scheme is appended in **Annexure – III.**

12. **Grade Conversion Table and Computation of SGPA and CGPA**

Table 3: Grade Conversion Table (Theory)

SN	Letter Grade	Grade Point Range	Mark Range (%)	Performance
1	O	9.00 - 10.00	90 – 100	Outstanding
2	A+	8.00 - < 9.00	80 - < 90	Excellent
3	A	7.00 - < 8.00	70 - < 80	Very Good
4	B+	6.00 - < 7.00	60 - < 70	Good
5	B	5.50 - < 6.00	55 - < 60	Above Average
6	C	5.00 - < 5.50	50 - < 55	Average
7	P	4.00 - < 5.00	40 - < 50	Pass
8	F	Below 4	Below 40	Fail
9	AB	0	-	Absent

Table 4: Grade Conversion Table (Practical)

SN	Letter Grade	Grade Point Range	Mark Range (%)	Performance
1	O	9.00 - 10.00	90 – 100	Outstanding
2	A+	8.00 - < 9.00	80 - < 90	Excellent
3	A	7.00 - < 8.00	70 - < 80	Very Good
4	B+	6.00 - < 7.00	60 - < 70	Good
5	B	5.50 - < 6.00	55 - < 60	Above Average
6	P	5.00 - < 5.50	50 - < 55	Pass
7	F	Below 5	Below 50	Fail
8	AB	0	-	Absent

Computation of SGPA & CGPA:

The UGC recommends the following procedure to compute the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

i. The SGPA is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e

$$SGPA\ (Si) = \Sigma(Ci \times Gi) / \Sigma Ci$$

where Ci is the number of credits of the ith course and Gi is the grade point scored by the student in the ith course.

ii. The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a programme, i.e.

$$CGPA = \Sigma(Ci \times Si) / \Sigma Ci$$

where Si is the SGPA of the ith semester and Ci is the total number of credits in that semester.

iii. The SGPA and CGPA shall be rounded off to 2 decimal points

iv. CGPA to Percentage (%) conversion formula:

$$Percentage\ (\%) = (CGPA) * 10$$

13. Credit Specifications:

a. Theory/Tutorial Courses: One hour/credit/week (a minimum of 15 hours of teaching per credit is required in a semester.

b. Laboratory/Performance Based Courses: A minimum of 30 hours in laboratory or Performance Based activities is required in a semester. Performance based activities include Studio activities, Workshop based activities, internship, Apprenticeship, Field based learning, community engagement learning, etc.

c. Each semester will consist of at least 15 weeks of Academic Work equivalent to 90 actual teaching days.

14. Assessment

- The final total assessment of examinees shall be made in terms of Continuous Internal Assessment (CIE) for 20% component and Semester End Examination (SEE) for 80% component for each THEORY course mentioned in the scheme of examination.
- The final total assessment of examinees shall be made in terms of Continuous Internal Assessment (CIE) and Semester End Examination (SEE) for each PRACTICAL course as mentioned in the scheme of examination.
- 'On Job Training/Internship' being a PRACTICAL course shall be assessed as given in the scheme as per the 'Evaluation Rubrics' mentioned in **Annexure – III.**
- 'Research Project' being a PRACTICAL course shall be assessed as given in the scheme as per the 'Evaluation Rubrics' mentioned in **Annexure – III.**

Table 5: Continuous Internal Assessment

1a	Attendance of the student during a particular semester	05 Marks
1b	An assignment based on curriculum to be assessed by the teacher concerned	05 Marks
1c	Subject wise class test or Performance Based Activities conducted by the teacher concerned	10 Marks
1	**Continuous Internal Evaluation Total marks**	20

- Expected Performance Based Activities shall consist of the following: (a) Group Discussion (b) Seminars (c) Power Point Presentations (d) Elocution (e) Debate (f) Role Play (g) Case Studies (h) Educational Games. The teacher is expected to undertake a minimum of four of the aforesaid activity.
- The CIE marks will be communicated to the University at the end of each semester, but before the semester end examinations / as instructed by the university. These marks will be considered for the declaration of the results.

- The record of CIE marks, evaluation & results should be maintained for a period of three year by the respective institute/college for verification by the competent authority.

15. **Attainment of Course Outcomes**

a. Continuous Internal Assessment shall be carried out at college/department level in such a way the attainment of prescribed learning outcomes can be measured. The college/department concerned is required to define outcome (4-6) for every course.

b. Semester End Examinations are conducted by the university. The question papers for these examinations are required to be set in such a way that the attainment of prescribed learning outcomes can be measured.

16. **Standard of Passing**

The scope of the subject, percentage of passing in Theory and Project and Internal Assessment will be governed as per following rules:

(i) In order to pass the Master of Science (M. Sc.) 1st, 2nd, 3rd and 4th Semester Examinations, an examinee shall obtain not less than 40% (Letter Grade P) marks in each theory course/paper, taking CIE & SEE together. Whereas, for practical/performance-based examination an examinee shall obtain not less than 50% (Letter Grade P) marks in each practical, taking CIE & SEE together. Moreover, a student is required to secure not less than 50% marks in aggregate i.e., taking all courses together in order to become eligible for the award of M. Sc. degree.

(ii) An examinee who is unsuccessful at the examination shall be eligible for admission to the subsequent examinations on payment of a fresh fee prescribed for the examination together with the conditions of the ordinance in force from time to time.

(iii) The candidates who pass all the semester examinations in the first attempt are eligible for ranks.

(iv) The results of the candidates who have passed the Semester-IV examination but not passed the lower semester examinations shall be declared as NCL (not completed lower semester examinations). Such candidates shall be eligible for the Degree only after successful completion of all the lower semester examinations.

(v) The successful examinees at the M.Sc. semester IV examination shall be awarded division based on CGPA as follows:

Table 6: CGPA *Vs* Division

CGPA	Division
7.5 and above	1st division with distinction
6 to 7.49	1st division
5 to 5.99	2nd division

(vi) Provisions of **Ordinance No. 3 of 2007** relating to the award of Grace Marks for passing and examination, securing higher division / class and for securing distinction in subject(s) shall be applicable.

(vii) University guidelines and directions issued from time to time regarding Improvement of Results, Reassessment/Revaluation and Incentive Marks shall be applicable to M.Sc. programs covered under this direction.

17. **Rules for ATKT (Allowed to Keep Term):**

An unsuccessful examinee at any semester examination shall be **ALLOWED TO KEEP TERM as per following conditions:**

Table 7: ATKT Rules

Admission to Semester	Eligibility for admission and taking University Examination
Semester – I	Candidate should have passed the qualifying examination as per the relevant Direction governing the course.
Semester – II	Candidate should have completed the term of the Ist semester and filled examination form.
Semester – III	Candidate should have completed the term of the IInd semester, filled the examination form of the same and has obtained exemption in 2/3rd passing heads of the Ist and IInd semesters taken together.
Semester – IV	Candidate should have completed the term of the IIIrd semester and filled the examination form of the same (in calculation, fraction if any to be ignored).

18. Absorption of students admitted under previous directions

Students admitted to Master in Cosmetic Technology, Master in Fashion Design, Master in Textile Design, Master in Textile and Clothing, Master in Hospitality Management, Master in Human Development and Master in Extension Education programs under previous directions shall not be absorbed into the scheme of examination under this direction. Hence, the university shall continue to conduct these examinations for THREE years to provide opportunities to failure students of these programs. All failure students after these additional SIX attempts will be required to take admission to 1st year of M. Sc. program as per this direction.

19. Provision for Transfer of Credits

The M.Sc. program offered under this direction provides enhanced academic flexibility to students in terms of selecting the courses they want to learn. A student can opt for any course from any statutory/recognized University or a MOOC from SWAYAM/NPTEL in lieu of a course mentioned in this scheme of examination as 'Elective' course. The mechanism for transfer of credits earned through these courses to be adhered is mentioned here:

1. Every student is mandatorily required to create an ID on Academic Bank of Credits (ABC) and shall submit her/his ID to the college.
2. Any Course mentioned in this scheme of examination under 'Elective' can be opted out by a student for taking a MOOC from SWAYAM/NPTEL learning platform.
3. A student cannot opt out any of the compulsory (Core) courses.
4. If a student is willing to opt out any 'Elective' course, he/she will have to mention this while submitting the examination form to the University for respective semester.
5. A certificate of completion of such an ODL/Online course shall be submitted by the student to the University through college before end term evaluation.
6. Such a certificate shall mandatorily have the number of credits, duration of the course and grades/marks obtained by the student and shall preferably have a QR code for verification.

7. The college shall submit the grades and marks obtained by the student to the University along with Internal Assessment marks for the concerned examination.
8. If a student has opted for an ODL/Online course in a particular semester and failed to submit the certificate within prescribed time, the student will be marked for 'Absent' for a particular course in that examination. Such a student will be required to fill in the examination form in the consecutive attempt and submit the passing certificate in order to get his/her corrected result.
9. A separate guideline 'Transfer of Credits' issued by the University will be applicable to the students of M. Sc. Program from the date of its issuance.

20. **Abbreviations Used:**

CIE: Continuous Internal Evaluation SEE: Semester End Examination
OJT: On Job Training (Internship/Apprenticeship), RM: Research Methodology, RP: Research Project

Annexure – I: Credit Structure given by Govt. of Maharashtra as per GR dated 16/05/2023
Annexure – II: Scheme of teaching & examination of all Major programs
Annexure – III: Rubrics and evaluation scheme for performance-based activities i.e., FP/OJT/RP etc.

Date: 31-10-2023
Place: Nagpur

(**Dr. Subhash R Chaudhari)**
Vice-Chancellor

Annexure – III

DETAILS OF 'ON JOB TRAINING/FIELD PROJECT/ INTERNSHIP AND RESEARCH PROJECT

[A] GUIDELINES FOR 'ON JOB TRAINING /FIELD PROJECT/ INTERNSHIP

Semester II – 4 Credits

1. **Learning Outcomes**

CO1	Student will be able to explain the profile of the institute/ company/ industry where the OJT/Internship has been carried out. **OR** Student will be able to describe the need for objective of undertaking the field project.
CO2	The student will be able to assess its Strengths, Weaknesses, Opportunities and Challenges (SWOC). **OR** Student will be able to list the outcomes of the Field Project.
CO3	Student will be able to determine the challenges and future potential of OJT/Internship. **OR** Student will be able to describe the profile of respondents / community involved in the 'Field Project'.
CO4	Student will be able to correlate theoretical classroom learning and its application in practical situations by accomplishing the tasks undertaken during OJT/Internship/FP.
CO5	Student will be able to apply various soft skills such as time management, positive attitude, and communication skills, scientific temperament during OJT/Internship/FP.
CO6	Student will be able to suggest improvements in processes/systems based on his experiences during OJT/Internship/FP.

2. Every student admitted to M.Sc. Second Semester is compulsorily required to undergo this course bearing 4 credits.
3. During second semester, all students will have to undergo OJT/Internship/FP of 120 Hours.
4. Each student will be required to submit a detailed report to the Department/ College/ Institute for the work undertaken during this period within 7 days of completion of the training following which the evaluation and assessment for OJT/Internship/FP will be done by the college/institute concerned. The Report submitted must be according to the Learning outcomes and in tune with the rubric for evaluation.
5. College/Institute is required to assign Supervisor/Mentor to students for OJT/Internship/FP who will guide the students in attaining the outcomes of this course.
6. It is desirable to appoint an external examiner from the company/organization where a student has completed his OJT/Internship/FP. However, the Principal/ HOD may appoint any other industry professional or subject expert as an external examiner. The remuneration (Rs. 200/- per student for internal and external examiner each), TA/DA or Conveyance Allowance to external examiner may be paid by the college/institute which will be reimbursed by the university as per established rules.
7. The Internal Examiner and External Examiner shall jointly evaluate the report submitted by the student and her/his seminar and shall immediately submit the evaluation report in the prescribed format provided along with.
8. The College/Institute shall submit marks obtained by students to the university as per prevalent system within 3 days of evaluation.

[illegible]

[A-1] EVALUATION REPORT OF OJT/INTERNSHIP/FP

M.Sc. (Major Subject) Examination, _____

Name of Student: _____

OJT/SIP Title: _____

Roll No._____ **Max. Marks: 100**

CRITERION	Parameters	Score
Continuous Internal Evaluation	Regularity, punctuality, sincerity, scientific temperament and feedback from the Organization where OJT/Internship/ FP has been carried out	_____out of 50
Organization Profile	Basic information about the organization where the OJT/Internship/ FP has been carried out	_____ out of 10
SWOC analysis	SWOC analysis, Key challenges & opportunities, Goals and objectives of the OJT/Internship/ FP	_____ out of 10
Application of theoretical knowledge and Conclusions	Details of the work done, experiments carried out, new techniques learnt, hands on training gained etc. Specific Conclusions based on empirical evidences. Recommendations based on practical feasibility	_____ out of 10
Report on OJT/Internship/ FP	One copy of spiral bound report duly signed by the Mentor and HOD to be submitted to the College/ Institute/ Department	_____ out of 10
Presentation	A powerpoint presentation based on work carried out and viva voce by external examiner.	_____ out of 10
	Total Marks Scored out of 100	

Name and Signature of Internal Examiner	Name and Signature of External Examiner

(8) GUIDELINES FOR RESEARCH PROJECT

Semester III – 4 Credits

Semester IV – 6 Credits

1 Learning Outcomes

On completion of the research project, the learner will be able to –	
CO1	Formulate a research problem statement under a given state of conditions
CO2	Carry out Review of Literature in the context of defined research problem and identify research gap
CO3	Develop Constructs, design data collection instruments and collect data using appropriate sampling technique and/or experiments
CO4	Analyse data to arrive at meaningful findings and conclusions using appropriate statistical tools with reference to defined research problem
CO5	Write a project report explaining research problems, hypotheses (if any), data collection, analysis of data, findings, conclusions, and future scope
CO6	Defend the research design, methods, and findings in the Open Defence Examination

Note: This table gives generic COs. COs may vary with reference to the requirement of a program (course)

2. The research project is a compulsory course carrying 10 credits [3rd Semester – 4 Credits and 4th Semester – 6 Credits] to become eligible for award of degree of Master of Commerce under this scheme of examination.
3. College/Institute is required to assign Supervisor to students for Research Project who will guide the students in attaining the outcomes of this course. One such supervisor can supervise maximum 20 students in a session.
4. A supervisor shall be a full-time teacher working with the college/institute concerned. However, in case of non-availability of adequate number of full-time teachers, an ad-hoc or CHB teacher can be appointed as a supervisor. In certain cases, an industry professional or subject expert can also be appointed as a supervisor by the Principal of college/ HOD of the Department. Supervisors shall not claim any additional remuneration/honorarium for guiding students.
5. Guidelines for Research Project:
    a. Objective: - Every student will be assigned a project in 3rd and 4th Semesters and it will be pursued by him/her under the supervision of an internal supervisor. The objective of the Project Work is to help the student develop his/her ability to apply multidisciplinary concepts, tools and techniques to solve organizational problems and/or to evolve new/innovative theoretical frame work.
    b. Types of Project: The Project may take any one of the following forms (not limited to these).
        1. Research project
        2. Review project
        3. Field study
    c. Submission of the Research Project Report: Every student shall submit a Hard Copy of the Research Project Report duly signed by the student and supervisor to the college/institute. Following documents are required to be submitted with the Research Project Report:
        i. A certificate from the Supervisor to the effect that the candidate has satisfactorily completed the Project work for not less than one session and that the Project work

is the result of the candidates own work and is of sufficiently high standard to warrant its presentation for examination

ii. A declaration by the candidate that the Project is the result of his/her own research work and the same has not been previously submitted to any examination of this University or any other University. The Project shall be liable to be rejected and /or cancelled if found otherwise.

iii. A certificate obtained through anti-plagiarism software stating that the original content of the project work report is more than 70% must be attached at the beginning of the project report and/or A certificate from the Supervisor to the effect that the candidate has not copied / plagiarised the contents of project report and that the supervisor has ensured the originality & authenticity of data /contents incorporated in the project report.

d. General Format of the Report: The project report should preferably be written in the following format (The format may vary depending on the nature of research topic):

i. Introduction
ii. Literature survey
iii. Aim and objective(s)
iv. Materials and Method (Experimental)
v. Results and Discussion
vi. Conclusion
vii. Future scope
viii. References/ Bibliography

6. The College/Institute shall schedule the project presentation by the students during semester end examination. The presentation shall be evaluated by the supervisor/mentor assigned to a student (as an Internal examiner) and an external examiner appointed by the college/institute.
7. The External Examiner for evaluation of Research Project Report shall be appointed by the University through its established rules and procedures. The remuneration (Rs. 200 per student for Internal and External Examiners), TA/DA or Conveyance Allowance to external examiner may be paid by the college/Institute which will be reimbursed by the university as per established rules.
8. The Internal Examiner and External Examiner shall jointly evaluate the report submitted by the student and her/his seminar and shall immediately submit the evaluation report in the prescribed format provided along with.
9. The College/Institute shall submit marks obtained by students to the university as per prevalent system within 3 days of evaluation.

Semester ___ Master of Science (M. Sc.) (OBE-NEP) Summer-20__

EVALUATION REPORT OF PROJECT REPORT & VIVA VOCE OF 100 MARKS/200 MARKS

Roll No.	Name of Student	Evaluation parameters (Sem-3/ Sem-4)						Total Marks Obtained (Sem-3: 100 marks/ Sem-4: 200 marks)
		Continuous Internal Evaluation (50/100)	Introduction and Literature survey (10/20)	Aim and objectives (5/10)	Materials and Method (10/20)	Results and Discussion (15/30)	Presentation and viva voce (10/20)	

Name & Signature of External Examiner

Name & Signature of Internal Examiner

Annexure – I

Illustrative Credit distribution structure for Two Years/One Year PG (M.Sc.) Programme

Year (2 Yr PG)	Level	Sem. (2 Yr)	Major		RM	OJT / FP	RP	Cum. Cr.	Degree
			Mandatory	Electives					
I	6.0	Sem I	12-14 (2*4 +2*2 or 3*4+2)	4	4			20-22	PG Diploma (after 3 Yr Degree)
		Sem II	12-14 (2*4 +2*2 or 3*4+2)	4		4		20-22	
Cum. Cr. For PG Diploma			24-28	8	4	4	-	40-44	
Exit option: PG Diploma (40-44 Credits) after Three Year UG Degree									
II	6.5	Sem III	12-14 (2*4 +2*2 or 3*4+2)	4			4	20-22	PG Degree After 3-Yr UG Or PG Degree after 4-Yr UG
		Sem IV	10-12 (2*4 +2 or 3*4)	4			6	20-22	
Cum. Cr. for 1 Yr PG Degree			22-26	8			10	40-44	
Cum. Cr. for 2 Yr PG Degree			46-54	16	4	4	10	80-88	
2 Years-4 Sem. PG Degree (80-88 credits) after Three Year UG Degree or 1 Year-2 Sem PG Degree (40-44 credits) after Four Year UG Degree									

RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY

Established by Government of Central Provinces Education Department by Notification No. 513 dated the 1st of August, 1923 & presently a State University governed by Maharashtra Public Universities Act, 2016 (Mah. Act No. VI of 2017)

DIRECTION NO. 37 OF 2023

DIRECTION GOVERNING THE EXAMINATION LEADING TO THE DEGREE OF MASTER OF COMMERCE (AS PER NEP 2020) EXAMINATION UNDER FACULTY OF COMMERCE AND MANAGEMENT

Whereas, The Maharashtra Public Universities Act, 2016 (VI of 2017) has come into force from 1st March 2017;

AND

Whereas, Rashtrasant Tukadoji Maharaj Nagpur University (hereinafter "the University") is now being governed by The Maharashtra Public Universities Act, 2016 (VI of 2017) (hereinafter the Act);

AND

Whereas, in the meetings of Board of Studies held on 4th July 2023 of M.Com., M.Com. (Professional), M.I.R.P.M. AND M.C.M, a committee was constituted to restructure the above programmes in tune with National Education Policy 2020, including the change in the names of the programmes. The said committee has submitted the draft scheme of examinations, syllabus and other details of these programmes including On Job Training (OJT), Community engagement Project (CEP) and Research Projects (RP) to be introduced in the various Semester of the restructured programmes on 14.7.23;

AND

Whereas, on behalf of the Faculty of Commerce and Management and the Academic Council, Vice Chancellor has accepted the draft submitted by the committee of the Board of Studies on 17.7.23 and the Notification to that effect was issued on 17th July 2023;

AND

Whereas, as per the National Education Policy 2020 and scheme of

Nomenclature of the programmes of the University Grants Commission, 2014, the nomenclature and scheme of examination and other details of the erstwhile degrees of M.Com (Professional), M.I.R.P.M., M.C.M. are now changed as per the report of the committee constituted for the same and a new structure of M.Com. with majors in ACCOUNTING AND TAXATION, BUSINESS STUDIES, COMPUTER MANAGEMENT, AND INDUSTRIAL RELATIONS & PERSONNEL MANAGEMENT is introduced;

AND

WHEREAS, to introduce a new programme or to incorporate the new scheme, Ordinance is required to be issued, but Ordinance making involve a time taking process.

Now, therefore, I, **Dr. Subhash R. Chaudhari**, Vice-Chancellor, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur in exercise of the powers vested in me under Section 12(8) of the The Maharashtra Public Universities Act, 2016 do hereby issue the following direction:

1. This direction shall be called "DIRECTION GOVERNING THE EXAMINATION LEADING TO THE DEGREE OF MASTER OF COMMERCE (AS PER NEP 2020) EXAMINATION UNDER FACULTY OF COMMERCE AND MANAGEMENT".
2. This Direction shall come into force from the academic session 2023-24.
3. **Interpretation Clause:** In this direction, unless the context requires otherwise the words, phrases and abbreviations used shall have the following meaning:
   a. **"Academic Council"** means Academic Council of R.T.M. Nagpur University.
   b. **"ATKT"** refers to allowed to keep term in higher semester.
   c. **"Board of Studies"** means Board of Studies for various subjects of commerce in the faculty of Commerce and Management in the University.
   d. **"CC"** means Core Course
   e. **"CIE"** means Continuous Internal Evaluation which refers to the Internal Assessment done at college concerned.
   f. **"Competent Authority"** (for admission purpose) means an "Authority" established or assigned the duty to regulate admissions in the course by the Government of Maharashtra or an authority constituted by the University, for this purpose.
   g. **"Credit Points"** refer to the product of No. of credits multiplied by the Grade Point for a given course/paper.
   h. **"Credit"** (C) for a course is dependent on the number of hours of instruction per week in that course, and is obtained by using a multiplier of one (1) for lecture and a multiplier of half (1/2) for practical (laboratory) hours.
   i. **"Course"** means a paper/subject (theory or practical) prescribed for any semester of the programme.
   j. **"Cumulative Grade Point Average (CGPA)"** refers to the Cumulative Grade Point Average weighted across all semesters (4 semesters)
   k. **"DSE"** means Discipline Specific Elective Course
   l. **"Degree"** means the Post Graduate Degree awarded after successful completion of the programme governed by this Direction.
   m. **"Fees"** means the fees prescribed by the University/ Shikshan Shulka Samiti of Government of Maharashtra, for the Under Graduate programme under this Direction, from time to time.

n. **"Grade letter"** is an index to indicate the performance of a student in a particular course (Paper). It is the transformation of actual marks secured by a student in a course/paper. Grade letters are O, A, B, C, P, F and AB.

o. **"Grade Point"** is the weightage allotted to each grade letter depending on the range of marks awarded in a course/paper.

p. **"Graduate programme"** means Bachelors' degree programme in Commerce.

q. **"MOOC"** means Massive Open Online Course offered by SWAYAM/NPTEL or any other recognized University or Institution

r. **"SEC"** means Skill Enhancement Course

s. **"Semester Grade Point Average (SGPA)"** refers to the performance of the student in a given semester. SGPA is based on the total credit points earned by the student in all the courses and the total number of credits assigned to the courses/papers in a Semester.

t. **"Student"** means student admitted to Bachelors degree programme in commerce under this direction.

u. **"ODL"** means Online and Distance Learning

v. **"University"** means Rashtrasant Tukadoji Maharaj Nagpur University.

4. Details of eligibility for M.Com. semester 1 examination

A) For **M.Com. with major in 'Accounting and Taxation' and 'Business Studies'**, the student shall have passed the B. Com or B. Com with Computer Applications or BBA degree examination of Rashtrasant Tukadoji Maharaj Nagpur University or any other equivalent degree of any other recognized university;

B) For M. Com. with major in **'Computer Management' and 'Industrial Relations'**, student shall have passed any degree examination of Rashtrasant Tukadoji Maharaj Nagpur University or any other recognized university;

C) The course leading to the Master Degree in Commerce being full time regular course in nature, the students enrolled for this course shall not be permitted to join any other course in this University or any other University simultaneously.

D) A student who has obtained the Post Graduate Diploma in Commercial Computer Applications (PGDCCA) from RTM Nagpur University shall be eligible for direct admission to second year of M. Com (Computer Management).

5. Change in Nomenclature for MCM, MIRPM and M. Com. (Professional) programs

Nomenclature of MCM, MIRPM and M. Com. (Professional) programs are changed to M. Com. programs. However, colleges offering any of these programs will be allowed to admit students to M. Com. programs by offering following 'Major' subjects:

Old Nomenclature	New Nomenclature	Availability of 'Major' subject
M. Com.	M. Com. (with Major Subject)	Accounting and Taxation Business Studies Computer Management Industrial Relations and Personnel Management
M. Com. (Professional)	M. Com. (with Major Subject)	Accounting and Taxation Business Studies Computer Management Industrial Relations and Personnel Management
M. C. M.	M. Com. (with Major Subject)	Computer Management
MIRPM	M. Com. (with Major Subject)	Industrial Relations and Personnel Management

6. **Duration of the Program, student progression path and provisions for Multiple Entry and Exit**

A. Duration of the M. Com. Program shall be TWO years with the provision for multiple exit as mentioned here:

a. A student can exit the program after successful completion of 1st and 2nd semesters having earned requisite number of credits as mentioned in the scheme of examination. Such a student shall be eligible for the award of 'Post Graduate Diploma in Commerce' with a major by the University.

OR

a student can continue the program in 2nd year in order to become eligible for the award of 'Master of Commerce' degree with a major subject by the university.

B. Re-entry

a. Students, opting for exits at any level, will have the option to re-enter the programme from where they have left off, in the same or in a different higher education institution within three years of exit and complete the degree programme within the stipulated maximum period of SEVEN years from the date of admission to first year.

b. Re-entry at various levels for lateral entrants in academic programmes shall be based on the earned and valid credits as deposited and accumulated in the Academic Bank of Credits (ABC) through Registered Higher Education Institutions and proficiency test records.

Eligibility for Award of Post Graduate Diploma /Master of Commerce Degree

Semester Completion	No. of Minimum Credits Required	Additional Credit Requirement	Eligible For
I and II	40	Nil	Post Graduate Diploma in Commerce with Major
III and IV	82	Nil	Master of Commerce Degree with Major

7. **Selection of 'Major' Subject**

A student admitted to this program is required to select any one of the following subjects as 'Major' subject to the availability of a particular subject in a particular college and is required to undergo and successfully complete the 'Core' and 'Elective' courses as mentioned in the scheme of examination of the selected 'Major' subject.

8. **Availability of 'Major' and 'Intake Capacity'**

All colleges affiliated to the University for offering **Master of Commerce (M. Com.)** Program/s in the Faculty of Commerce and Management shall adhere to the following:

Affiliated Program	Sanctioned Intake	'Major' to be offered
M. Com.	As approved by the University	• Accounting and Taxation • Business Studies • Industrial Relations and Personnel Management • Computer Management

NOTES:

- Total intake capacity for the program as approved by the university shall remain the same and be divided amongst the 'Major' subjects allowed for M. Com. program.

- The COLLEGE may offer a particular 'Major' subject depending on the availability of students and teachers.
- The COLLEGE is not expected to force any student to opt for a particular subject where a choice is provided in the scheme of examination.
- Nomenclatures for MCM, MIRPM and M. Com. (Professional) programs have been restructured as M. Com. and the intake for all these programs shall be as per M. Com. i. e. 80 students per section.
- Tuition Fees and Examination Fees for **'Computer Applications' and 'Industrial Relations and Personnel Management'** major subjects shall be as per fees for **MCM and MIRPM** programs respectively as prescribed by the university.

9. All colleges affiliated to the University offering M. Com. Program are required to put up a list of 'Major' and subjects it is offering on the Notice Board as well as on the website of the college to make students aware about the availability of subjects. Moreover, colleges are expected to define and display the 'Standard Operating Procedures' for the college staff members and students to facilitate the process of selecting 'Major' subjects.

10. In pursuance with the National Education Policy 2020 and a Government Resolution No. NEP-2022/प्र.क 09/शिशी-3/शिक्षण dated 16th May 2023 issued by the Government of Maharashtra, the credit framework for M. Com. Program shall be as mentioned in **Annexure – I.**

11. M. Com. Program Outcomes

a. Apply knowledge of theories and procedures related to accountancy, economics, management, and other allied areas to solve problems of business organizations.
b. Foster Analytical and Critical thinking abilities for data-based decision making
c. Ability to develop Value Based Leadership ability
d. Ability to understand, analyze and communicate global, economic, legal, and ethical areas of business
e. Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.

12. Research Methodology Course:

'Research Methodology' is a compulsory course and the curriculum and evaluation pattern is common for all 'Major Subject' **(Annexure – IV)**

13. Evaluation Scheme for OJT/FP/CEP and RP

A student of M. Com. Semester – II must compulsorily undergo 'On Job Training' during second semester. A 'Field Project' or 'Community Engagement Project' of same duration shall be considered as equivalent to OJT. Evaluation of OJT/FP/CEP needs to be completed by the college/institute in compliance with the provisions mentioned in Annexure-III and to be submitted to the university within 10 days of completion of second semester examination.

Similarly, a student of M. Com. Semester – III and IV is required to undertake a 'Research Project'.

Scope of these courses and their detailed evaluation scheme is appended in **Annexure – III.**

14. Teaching and Examination Scheme

Teaching and Examination Schemes for all available 'Major' subjects for Master of Commerce (M. Com.) degree are appended in **Annexure – II.**

15. Grade Conversion Table and Computation of SGPA and CGPA

Grade Conversion Table (Theory)

SN	Letter Grade	Grade Point	Mark Range	Performance
1	O	9.00 - 10.00	90 – 100	Outstanding
2	A+	8.00 - < 9.00	80 - < 90	Excellent
3	A	7.00 - < 8.00	70 - < 80	Very Good
4	B+	6.00 - < 7.00	60 - < 70	Good
5	B	5.50 - < 6.00	55 - < 60	Above Average
6	C	5.00 - < 5.50	50 - < 55	Average
7	P	4.00 - < 5.00	40 - < 50	Pass
8	F	Below 4	Below 40	Fail
9	AB	0	-	Absent

Grade Conversion Table (Practical)

SN	Letter Grade	Grade Point	Mark Range	Performance
1	O	9.00 - 10.00	90 – 100	Outstanding
2	A+	8.00 - < 9.00	80 - < 90	Excellent
3	A	7.00 - < 8.00	70 - < 80	Very Good
4	B+	6.00 - < 7.00	60 - < 70	Good
5	B	5.50 - < 6.00	55 - < 60	Above Average
6	P	5.00 - < 5.50	50 - < 55	Pass
7	F	Below 5	Below 50	Fail
8	AB	0	-	Absent

Computation of SGPA & CGPA:

The UGC recommends the following procedure to compute the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA).

i. The SGPA is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e

$$SGPA\ (Si) = \Sigma(Ci \times Gi) / \Sigma Ci$$

where Ci is the number of credits of the ith course and Gi is the grade point scored by the student in the ith course.

ii. The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a programme, i.e.

$$CGPA = \Sigma(Ci \times Si) / \Sigma\ Ci$$

where Si is the SGPA of the ith semester and Ci is the total number of credits in that semester.

iii. The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

iv. CGPA to Percentage (%) conversion formula:

Percentage (%) = (CGPA) * 10

16. Credit Specifications:

a. Theory/Tutorial Courses: One hour/credit/week (a minimum of 15 hours of teaching per credit is required in a semester.

b. Laboratory/Performance Based Courses: A minimum of 30 hours in laboratory or Performance Based activities is required in a semester. Performance based activities include Studio activities, Workshop based activities, Internship, Apprenticeship, Field based learning, community engagement learning, etc.

c. Each semester will consist of at least 18 weeks of Academic Work equivalent to 90 actual teaching days.

17. Assessment

- The final total assessment of examinees shall made in terms of Continuous Internal Assessment (CIE) for 20% component and Session End Examination (SEE) for 80% component for each THEORY course mentioned in the scheme of examination.
- 'On Job Training/SIP' being a PRACTICAL course shall be assessed at college/department level as per the 'Evaluation Rubrics' mentioned in **Annexure – III.**
- 'Research Project' being a PRACTICAL course shall be assessed at college/department level as per the 'Evaluation Rubrics' mentioned in **Annexure – III.**
- Expected Performance Based Activities shall consist of the following: (a) Group Discussion (b) Seminars (c) Power Point Presentations (d) Elocution (e) Debate (f) Role Play (g) Case Studies (h) Educational Games. The teacher is expected to undertake a minimum of four of the aforesaid activity.

Continuous Internal Assessment

1a	Attendance of the student during a particular semester	05 Marks
1b	An assignment based on curriculum to be assessed by the teacher concerned	05 Marks
1c	Subject wise class test or Performance Based Activities conducted by the teacher concerned	10 Marks
1	**Continuous Internal Evaluation Total marks**	**20**

- The CIE marks will be communicated to the University at the end of each semester, but before the semester end examinations / as instructed by the university. These marks will be considered for the declaration of the results.
- The record of CIE marks, evaluation & results should be maintained for a period of one year by the respective institute/college for verification by the competent authority.

18. Attainment of Course Outcomes

a. Continuous Internal Assessment shall be carried out at college/department level in such a way that the attainment of prescribed learning outcomes can be measured. The college/department concerned is required to define evaluation rubrics for 'Performance Based Activities' conducted for CIE.

b. Semester End Examinations are conducted by the university. The question papers for these examinations are required to be set in such a way that the attainment of prescribed learning outcomes can be measured.

19. Standard of Passing

The scope of the subject, percentage of passing in Theory and Project and Internal Assessment will be governed as per following rules:

(i) In order to pass the Master of Commerce (M.Com.) 1st, 2nd, 3rd and 4th Semester Examinations, an examinee shall obtain not less than 40 % (Grade 4) marks in each theory course/paper, taking CIE & SEE together. Whereas, for practical/performance-based examination an examinee shall obtain not less than 50 % (Grade 5) marks in each practical, taking CIE & SEE together. Moreover, a student is required to secure not less than 50%

marks in aggregate i.e. taking all courses together in order to become eligible for the award of M. Com. degree.

(ii) An examinee who is unsuccessful at the examination shall be eligible for admission to the subsequent examinations on payment of a fresh fee prescribed for the examination together with the conditions of the ordinance in force from time to time.

(iii) The candidates who pass all the semester examinations in the first attempt are eligible for ranks.

(iv) The results of the candidates who have passed the Semester-IV examination but not passed the lower semester examinations shall be declared as NCL (not completed lower semester examinations). Such candidates shall be eligible for the Degree only after successful completion of all the lower semester examinations.

(v) The successful examinees at the B.Com. semester VI examination shall be awarded division based on CGPA as follows:

CGPA	Division
7.5 and above	1st division with distinction
6 to 7.49	1st division
5 to 5.99	2nd division

(vi) Provisions of **Ordinance No. 3 of 2007** relating to the award of Grace Marks for passing and examination, securing higher division / class and for securing distinction in subject(s) shall be applicable.

(vii) University guidelines and directions issued from time to time regarding Improvement of Results, Reassessment/Revaluation and Incentive Marks shall be applicable to B. Com. Program covered under this direction.

20. Absorption of students admitted under previous directions

Students admitted to M. Com., M. Com. (Professional), MCM and MIRPM programs under previous directions shall not be absorbed into the scheme of examination under this direction. Hence, the university shall continue to conduct these examinations for THREE years to provide opportunities to failure students of these programs. All failure students after these additional SIX attempts will be required to take admission to 1st year of M. Com. program as per this direction.

21. Rules for ATKT (Allowed to Keep the Term):

An unsuccessful examinee at any semester examination shall be **ALLOWED TO KEEP TERM as per following conditions:**

Admission to Semester	Eligibility for admission and taking University Examination
Semester – I	Candidate should have passed the qualifying examination as per the relevant Direction governing the course.
Semester – II	Candidate should have completed the term of the Ist semester and filled examination form.
Semester – III	Candidate should have completed the term of the IInd semester, filled the examination form of the same and has obtained exemption in 2/3rd passing heads of the Ist and IInd semesters taken together.

Semester – IV	Candidate should have completed the term of the IIIrd semester and filled the examination form of the same.

22. Abbreviations Used:

CIE: Continuous Internal Evaluation SEE: Semester End Examination

OJT: On Job Training (Internship/Apprenticeship), RM: Research Methodology, RP: Research Project

23. Provision for Transfer of Credits

The M.Com. program offered under this direction provides enhanced academic flexibility to students in terms of selecting the courses they want to learn. A student can opt for any course from any statutory/recognized University or a MOOC from SWAYAM/NPTEL in lieu of a course mentioned in this scheme of examination as 'Elective' course. The mechanism for transfer of credits earned through these courses to be adhered is mentioned here:

1. Every student is mandatorily required to create an ID on Academic Bank of Credits (ABC) and shall submit her/his ID to the college.
2. Any Course mentioned in this scheme of examination under 'Elective' can be opted out by a student for taking a MOOC from SWAYAM/NPTEL learning platform.
3. A student cannot opt out any 'Core' course.
4. If a student is willing to opt out any 'Elective' course, he/she will have to mention this while submitting the examination form to the University for respective semester.
5. A certificate of completion of such an ODL/Online course shall be submitted by the student to the University through college before end term evaluation.
6. Such a certificate shall mandatorily have the number of credits, duration of the course and grades/marks obtained by the student and shall preferably have a QR code for verification.
7. The college shall submit the grades and marks obtained by the student to the University along with Internal Assessment marks for the concerned examination.
8. Marks scored by a student in a MOOC shall be proportionately divided into SEE and CIE in the proportion of 80:20.
9. If a student has opted for an ODL/Online course in a particular semester and failed to submit the certificate within prescribed time, the student will be marked for 'Absent' for a particular course in that examination. Such a student will be required to fill in the examination form in the consecutive attempt and submit the passing certificate in order to get his/her corrected result.
10. A separate guideline for 'Transfer of Credits' issued by the University will be applicable to the students of M. Com. Program from the date of its issuance.

Date: 20/3/2023

Nagpur

Dr. Subhash R Chaudhari

Vice-Chancellor

ANNEXURE – II

M.COM (ACCOUNTING AND TAXATION)
W.E.F.2023-24

Program Specific Outcomes

PSO 1	The student will be able to **apply** professional knowledge of accounting and taxation in real life business situations
PSO 2	The student will be able to **interpret and analyse** the financial statements
PSO 3	The student will be able to **demonstrate** effective oral and written business communication
PSO 4	The student will be able to **implement** traditional and modern strategies and practices of costing, management, auditing and taxation
PSO 5	**Develop** competency in students to make them employable in the accounting and taxation industry

Teaching and Examination Scheme

A teaching and examination scheme for students admitted to the M. Com. (Accounting and Taxation) Program shall be as follows:

Master of Commerce (Accounting and Taxation)
Semester I

Sr. No.	Course Type	Subjects	Course Code	Teaching Scheme			Examination Scheme					Credits
				Total Hours Per Week			Max. Marks SEE (TH) *	Max Marks SEE (PR)	Max. Marks (CIE)	Total Marks	Min. Passing Marks	
				Theory	Practical	Total						
1.	Core	Advanced Financial Accounting – I		4	-	4	80	-	20	100	40	4
2.	Core	Advanced Cost Accounting		4	-	4	80	-	20	100	40	4
3.	Core	Indian Financial System		4	-	4	80	-	20	100	40	4
4.	Elective	Advanced Statistical Techniques OR Advanced Auditing OR MOOC		4	-	4	80	-	20	100	40	4
5.	Core	Research Methodology		4	-	4	80	-	20	100	40	4

				20	-	20	400	-	100	500	250	20

***** Semester End Examination which is mandatorily required to be appeared by every student

Note:

1. TH = Theory, CIE= Continuous Internal Evaluation
2. SEE for Theory as well as Practical examinations as mentioned above shall be conducted by the University for all semesters and the CIE shall be conducted by colleges on behalf of the University for all Semesters.

Master of Commerce (Accounting and Taxation)
Semester II

Sr. No.	Course Type	Subjects	Course Code	Teaching Scheme			Examination Scheme					Credits
				Total Hours Per Week			Max. Marks SEE (TH) *	Max Marks SEE (PR)	Max. Marks (CIE)	Total Marks	Min. Passing Marks	
				Theory	Practical	Total						
1.	Core	Advanced Financial Accounting – II		4	-	4	80	-	20	100	40	4
2.	Core	Cost Control and Analysis		4	-	4	80	-	20	100	40	4
3.	Core	Financial Analysis and Control		4	-	4	80	-	20	100	40	4
4.	Elective	Business Ethics and Corporate Social Responsibility OR Advanced Financial Management OR MOOC		4	-	4	80	-	20	100	40	4
5.	Core	On Job Training		-	8	8	-	100	-	100	50	4
				20	-	20	320	100	80	500	250	20

***** Semester End Examination which is mandatorily required to be appeared by every student

Note:

1. TH = Theory, CIE= Continuous Internal Evaluation
2. SEE for Theory as well as Practical examinations as mentioned above shall be conducted by the University for all semesters and the CIE shall be conducted by colleges on behalf of the University for all Semesters.

Master of Commerce (Accounting and Taxation)
Semester III

Sr. No.	Course Type	Subjects	Course Code	Teaching Scheme			Examination Scheme					Credits
				Total Hours Per Week			Max. Marks SEE (TH) *	Max Marks SEE (PR)	Max. Marks (CIE)	Total Marks	Min. Passing Marks	
				Theory	Practical	Total						
1.	Core	Advanced Management Accounting		4	-	4	80	-	20	100	40	4
2.	Core	Income Tax		4	-	4	80	-	20	100	40	4
3.	Core	Special Areas in Accounting		4	-	4	80	-	20	100	40	4
4.	Elective	Operations Research OR Strategic Management OR MOOC		4	-	4	80	-	20	100	40	4
5.	Core	Research Project		-	8	8	-	100	-	100	50	4
				16	8	24	320	100	80	500	250	20

***** Semester End Examination which is mandatorily required to be appeared by every student

Note:

1. TH = Theory, CIE= Continuous Internal Evaluation
2. SEE for Theory as well as Practical examinations as mentioned above shall be conducted by the University for all semesters and the CIE shall be conducted by colleges on behalf of the University for all Semesters.

Master of Commerce (Accounting and Taxation)
Semester IV

Sr. No.	Course Type	Subjects	Course Code	Teaching Scheme			Examination Scheme					Credits
				Total Hours Per Week			Max. Marks SEE (TH) *	Max Marks SEE (PR)	Max. Marks (CIE)	Total Marks	Min. Passing Marks	
				Theory	Practical	Total						

1.	Core	Accounting for Managerial Decisions		4	-	4	80	-	20	100	40	4
2.	Core	Business Tax Assessment and Planning		4	-	4	80	-	20	100	40	4
3.	Core	Indirect Taxes		4	-	4	80	-	20	100	40	4
4.	Elective	Human Resources Accounting OR Tax Assessment: Process and Appeals OR MOOC		4	-	4	80	-	20	100	40	4
5.	Core	Research Project		-	12	12	-	100	-	100	50	4
				16	12	28	320	100	80	500	250	20

***** Semester End Examination which is mandatorily required to be appeared by every student

Note:

1. TH = Theory, CIE= Continuous Internal Evaluation
2. SEE for Theory as well as Practical examinations as mentioned above shall be conducted by the University for all semesters and the CIE shall be conducted by colleges on behalf of the University for all Semesters.

Detailed Syllabus

M.Com. (Accounting and taxation) First Year Semester – I
Course Type: Major Course
Course Name: **Advanced Financial Accounting – I**
Course Code ----

Course Outcomes

CO1	Student will be able to gain knowledge about Computer Software Accounting, and will be able to amount of Insurance claim.
CO2	Student will be able be aware of Hire Purchase system and installment system.
CO3	To develop competency of students to solve problem in accounting for Service Sector.
CO4	To develop competency of students to solve problem in accounting for non-profit organization.

Unit - I

COMPUTER SOFTWARE ACCOUNTING.

Company Statutory Records, Statutory Books of Accounts & Registers.Statutory Reports Corporate Governance. (Theory)

FIRE INSURANCE CLAIMS – Poor Selling Live Goods, Including Loss of Profit Policies (Numerical)

Unit - II

HIRE PURCHASE ACCOUNTING:

Meaning of Hire purchase Accounts, Special Feature, Merits and Demerits, Accounting Arrangement of Hire Purchase Transaction, Re-possession; Partial Re-possession and Complete Repossession Hire Purchase, stock and Debtors Method (Theory & Numerical)

Unit - III

SERVICE SECTOR ACCOUNTING

A) Hotel accounting – Introduction –Visitor's ledger.
B) Hospital accounting – Introduction –Capital and revenue expenditure OPD & IPD Register.
C)Transport Undertaking – Preparation of final accounts of Roadways. (Theory & Numerical)

Unit - IV

ACCOUNTING FOR NON-PROFIT ORGANIZATION

Non-profit Entities, Characteristics of a Non-profit Organization, Accounting Procedures, Terminology Used in Accounts of Non-Profit Organizations, Source of Income of Non-profit Organization, Fund Base and Non Fund Based Accounting. (Theory & Numerical)

Books Recommended:-

1) Gupta R. L. – Advanced Financial Accounting – S. Chand & Sons
2) Kumar, Anil S. – Advanced Financial Accounting – Himalaya Publication House
3) Shukla and Grewal : Advanced Accounts (S. Chand & Ltd. New Delhi)
4) Jain and Narang : Advanced Accounts (Kalyani Publishers, Ludhiana)
5) Sr. K. Paul : Accountancy, Volume –I and II (New Central Book Agency, Kolkata)
6) R. K..Lele and Jawaharlal : Accounting Theory (Himalaya Publishers)
7) Dr. L. S. Porwal : Accounting Theory (Tata McGraw Hill)
8) Financial Accounting A. Mukherjee, M. Hanif (McGraw Hill)

Question Paper Pattern
Advanced Financial Accounting

Time: 3 Hrs			Max. Marks: 80
Notes: 1. All questions are compulsory 2.All questions carry equal marks			
Question No.	Unit	Nature of Question	Marks
1	1	A. Theory/Problem B. Problem OR C. Problem	08 08 16
2	2	A. Theory/Problem B. Problem OR C. Problem	08 08 16
3	3	A. Theory/Problem B. Problem OR C. Problem	08 08 16
4	4	A. Theory/Problem B. Problem OR C. Problem	08 08 16
5	1 2 3 4	A. Theory/Problem B. Theory/Problem C. Theory/Problem D. Theory/Problem	04 04 04 04

M.Com. (Accounting and Taxation) First Year Semester – I
Course Type: Major Course
Course Name: **Advanced Cost Accounting**
Course Code ----

Course Outcomes

CO1	Student will be able the gain knowledge about classification of cost, methods and techniques, and student will be able to calculate the cost of goods.
CO2	To familiarizes the student for process account.

CO3	Student will be able to calculate the profit on contract.
CO4	Student will be able to evaluate the reconciliation of cost and Financial Accounting

Unit - I

COST ACCOUNTING

Overview of basic concepts in Cost Accounting - Element of Cost: Material, Labour and Overheads. - Material: Purchase procedure, storage and Inventory control. (Theory)
Preparation of Statement of Cost and Profit, Production Account, Estimate, Tenders or Quotations. (Numerical)

Unit - II

PROCESS ACCOUNTS

Introduction - Features of process, Concept of Process Loss, Abnormal Loss, Normal Loss, Abnormal Gain. And Computation of Joint Product, equivalent Unit production and inter process profit. (Theory & Numerical)

Unit - III

CONTRACT COSTING:

Profit on Complete and incomplete contract, contract running for more than one year, two to three contracts running simultaneously, contract near to completion (Theory & Numerical)

Unit - IV

COST BOOK KEEPING

Cost Book Keeping and Reconciliation between Cost and Financial Accounts: Cost Book-Keeping, Cost Ledgers, Interlocking and Integral Accounts, Reconciliation of Cost and Financial Accounts, Reasons, needs, Methods. (Theory & Advance Numerical)

Books Recommended: -

01 Cost Accounting-Principles & Practices Jawahar Lal & Seema Shrivastawa Tata Mcgraw Delhi

02 Advanced Cost Accounting and Cost Systems Ravi M Kishor: Taxmann New Delhi

03 Cost Accounting Theory and Problems S. N. Maheshwari Mittal Shree Mahavir Book Depot. Delhi

04 Advanced Cost Accounting Jain and Narang Kalyani Publication New Delhi

05 R.S.N.Pallai,VBhagavathi–CostAccounting–S.Chand,NewDelhi

06 Cost Accounting-Principles & Practices Dr.M.N. Arora Vikas Publishing House New Delhi

07.JainS.P.– AdvancedCostAccounting–KalyaniPublication

08. Gawada,JMade–AdvancedCostAccounting–HimalayaPublicationHouse

Question Paper Pattern
Advanced Cost Accounting

Time: 3 Hrs			Max. Marks: 80
Notes: 1. All questions are compulsory			

2.All questions carry equal marks			
Question No.	Unit	Nature of Question	Marks
1	1	A. Theory/Problem B. Problem OR C. Problem	08 08 16
2	2	A. Theory/Problem B. Problem OR C. Problem	08 08 16
3	3	A. Theory/Problem B. Problem OR C. Problem	08 08 16
4	4	A. Theory/Problem B. Problem OR C. Problem	08 08 16
5	1 2 3 4	A. Theory/Problem B. Theory/Problem C. Theory/Problem D. Theory/Problem	04 04 04 04

M.Com. (Accounting and Taxation) First Year Semester – I
Course Type : Major Course
Course Name : Indian Financial System

Course Code ----

Course Outcomes

CO1	Students will be able to understand various components of Formal Financial System
CO2	Students will be able to acknowledge the definition of Banking and creation of money banking System.
CO3	Students will be able to understand the basics of Insurance and components related to it.
CO4	Students will have the knowledge of process of creating funds in Capital Market.

Unit I: COMPONENTS OF FORMAL FINANCIAL SYSTEM-

Structure & Functions of Financial system, Nature and role of financial institutions and financial markets, financial system and economic growth. Money Markets - Overview of money markets, functions & operations, instruments, Treasury Bills and types, Commercial papers, Commercial bills, Call money market, Money market intermediaries, Money markets and monitory policies in India.

UNIT II: BANKING –

Definition, creation of money, Present structure of commercial banking system in India, Brief history; functions, Forms of banking Managerial functions in banks. Management of deposits and Advances, Lending practices, types of advances, principles of sound bank lending, preparation of reports, Limits of credit, bank investments, Liquidity and profitability, government securities, Management of Bank Finance - Bank Accounts, Records, Reports, Statement of advances, Evaluation of loan applications, ALM and NPA Management. Fee based Vs. Fund based services, Types of fee based services offered, merchant banking services. Role of Technology in Banking services Innovation.

UNIT III: INSURANCE:

Insurance Basics, Insurance Vs. other savings and investment options, tax benefits , life cycle need solutions, customer needs and available products. Life Insurance Products - Traditional and Unit linked policies, individual and group policies, with profit and without profit policies, Different type of insurance products, Medi-Claim and health insurance products - Salient features, procedures involved in claim settlement. General Insurance Products - Different types of products available in the market, Salient features. LIC – Constitution, objectives and functions. Role of IRDA in regulating the industry. Product Portability.

UNIT IV: CAPITAL MARKETS –

History of Indian capital markets, Reforms in capital markets, Primary Markets – functions, free pricing, book building, Secondary Markets – Organization, membership, Functions and management of stock exchanges, functioning of BSE, NSE, OTCEI, ICSEI. Internet trading. Mutual fund, objectives, functions, salient features. Regulatory Bodies & services: SEBI – Organization, powers and functions, Investor protection measures, achievements, RBI – objectives, organization, role, fiscal & monetary policy, Pension fund authority, CRISIL, SHCIL- objectives & functions. EXIM bank, Foreign Exchange Markets, Currency transactions; Foreign Exchange Risk. Types of risks. Risk management.

BOOKS RECOMMENDED

1. Principles of Bank Management by Vasant Desai, Himalaya Publishing house,
2. Insurance & Risk Management , Dr. P. K. Gupta, Himalaya Publishing House
3. Indian Financial System by Bharti V. Pathak, Pearson education
4. Financial Markets & Services, E. Gordon &K.Natarajan, Himalaya Publishing
5. Indian financial system , M Y Khan, Tata McGraw hill
6. Indian financial system, P Bezborah, R Singh, Kalyani pub
7. Indian financial system, K Gupta, N Aggarwal, Kalyani publication
8. Bhartiya Vitteeya Vyavastha,Dr.Arvind Shende, Dr.Devendra Mohture, Anuradha Prakashan, Nagpur

Question Paper Pattern
Indian Financial System

Time: 3 Hrs			Max. Marks: 80
Notes: 1. All questions are compulsory 2.All questions carry equal marks			
Question No.	Unit	Nature of Question	Marks
1	1	A. Theory B. Theory OR C. Theory	08 08 16
2	2	A. Theory B. Theory OR C. Theory	08 08 16
3	3	A. Theory B. Theory OR C. Theory	08 08 16
4	4	A. Theory B. Theory OR C. Theory	08 08 16
5	1 2 3 4	A. Theory B. Theory C. Theory D. Theory	04 04 04 04

M.Com. (Accounting and Taxation) First Year Semester – I
Course Type: Elective Course
Course Name: **Advanced Statistical Techniques**
Course Code ----

Course Outcomes

CO1	Students will develop an understanding of basic Statistical decision making and analyze the significance.

CO2	Students will be able to understand Statistical quality control and will also be able to draw association of attributes and F test.
CO3	Students will be able to understand Analysis of time series and will also be able to calculate probability.
CO4	Student will be able to perform regression analysis, interpolation and also know their usages.

Unit I

1. Statistical decision: - decision environment – Decision Making Under risk and certainty and utility theory.
2. Sampling and test of significance: - Large and small samples, Test of significance: Chi square test 'T' test and Z test.

Unit-II

1. Statistical quality control: Causes Variations in quality characteristics types of quality controls charts, production controls acceptance sampling.
2. Association of Attributes consistency of data, Two and three attributes analysis of Variances F test.

Unit-III

1. Analysis of time series, components importance, measurement of trend, the graphical method semi average method and moving average method.
2. Probability: Laws of probability, simple and compound probabilities, permutation and combination

Unit –IV

1. Regression analysis.
2. Interpolation and Extrapolation: - Newton's Method, Binomial method and Langrage's Method

List of Reference Books:-

1. Fundamentals of statistics : D. N. Elhance&VeenaElhance
2. Statistices : V. K. Kapoor – S. Chand & Sons
3. Statistics : B. New Gupta – SahityaBhavan Agra
4. Statistics Methods : S.P. Gupta – S. Chand & Sons
5. Fundamental of Statistics: S. C. Gupta – Himalaya Publishing House
6. Business Mathematics & Statistics: NEWK Nag & S.C. Chanda – Kalyani Publishers
7. Problem in statistics: Y. R. Mahajan - Pimpalapure Published Nagpur.
8. Advanced Statistical Method: Dr. V.R. Bagde, Dr. Pramod Fating, Dr. Milind Gulhane

Question Paper Pattern
Advanced Statistics

Time: 3 Hrs			Max. Marks: 80
Notes: 1. All questions are compulsory 2.All questions carry equal marks			
Question No.	Unit	Nature of Question	Marks
1	1	A. Theory/Problem B. Problem OR C. Problem	08 08 16
2	2	A. Theory/Problem B. Problem OR C. Problem	08 08 16
3	3	A. Theory/Problem B. Problem OR C. Problem	08 08 16
4	4	A. Theory/Problem B. Problem OR C. Problem	08 08 16
5	1 2 3 4	A. Theory/Problem B. Theory/Problem C. Theory/Problem D. Theory/Problem	04 04 04 04

M.Com. (Accounting and Taxation) First Year Semester – I
Course Type : Elective Course
Course Name : ADVANCED AUDITING
Course Code ----

Course Outcomes

CO1	To impart knowledge of Auditing such as Audit programs, Vouching, Verification, and Valuation.
CO2	To understand the significance of using computers in the Audit program.
CO3	To provide hands-on training in Auditing of a Limited Company.
CO4	To understand the Management Audit and different firms Audit

Unit - I

INTRODUCTION TO AUDITING

Auditing concepts, Basic principles governing an Audit, Relationship of auditing with other disciplines, Audit Program, Vouching, Verification and Valuation.

Unit - II

AUDIT OF LIMITED COMPANIES

Preliminaries to the Audit of a limited company, Audit of share capital transactions, Debentures and other transactions, Audit report with special reference to CARO 2003, Profit and divisible profit, Dividends, Investigation.

Unit - III

AUDIT UNDER COMPUTERIZED INFORMATION SYSTEM ENVIRONMENT

Special Aspects of Computerized Information System Audit Environment, Need for Review of Internal Control, Use of Computers for Audit Process, Audit Tools, Test Packs, Computerized Audit Program,

Unit - IV

SPECIAL CONSIDERATIONS IN

Government audit, Miscellaneous Audits, Audit of a sole trader, Audit of a firm, Audit of a small company, Audit of educational institutions, Audit of Hospital, Audit of Club, Audit of Hotels, Audit of Insurance Company, Audit of Banks.

Books Recommended: -

- Aruna Jha: Students Guide to Auditing and Assurance, Taxman Publication, New Delhi
- S.D. Sharma: Auditing Principle and Practice, Taxman Publication, New Delhi
- Dr. Arvind shende, Auditing-Anuradha Prakashan, Nagpur.
- L. N. Chopde, Auditing – Sheth Publishers
- Dr. K. R. Dixit: Auditing – Vishwa Publishers

Question Paper Pattern
Advanced Auditing

Time: 3 Hrs			Max. Marks: 80
Notes: 1. All questions are compulsory 2.All questions carry equal marks			
Question No.	Unit	Nature of Question	Marks
1	1	A. Theory B. Theory OR C. Theory	08 08

			16
2	2	A. Theory B. Theory OR C. Theory	08 08 16
3	3	A. Theory B. Theory OR C. Theory	08 08 16
4	4	A. Theory B. Theory OR C. Theory	08 08 16
5	1 2 3 4	A. Theory B. Theory C. Theory D. Theory	04 04 04 04

M.COM (BUSINESS STUDIES)
W.E.F.2023-24

Program Specific Outcomes

PSO 1	Develop necessary professional knowledge and skills in in various functional areas of business and commerce

PSO 2	Demonstrate the ability to apply various theories of business management to solve business problems
PSO 3	Demonstrate effective oral and written business communication
PSO 4	Implement traditional and modern strategies and practices of business management, business economics and allied areas
PSO 5	Develop competency in students to make them employable in the corporate world

Teaching and Examination Scheme

A teaching and examination scheme for students admitted to the M. Com. (Business Studies) Program shall be as follows:

Master of Commerce (Business Studies)

Semester I

Sr. No.	Course Type	Subjects	Course Code	Teaching Scheme			Examination Scheme					Credits
				Total Hours Per Week			Max. Marks SEE (TH) *	Max Marks SEE (PR)	Max. Marks (CIE)	Total Marks	Min. Passing Marks	
				Theory	Practical	Total						
1.	Core	Organizational Behavior		4	-	4	80	-	20	100	40	4
2.	Core	Business Laws		4	-	4	80	-	20	100	40	4
3.	Core	Managerial Economics		4	-	4	80	-	20	100	40	4
4.	Elective	Fundamentals of Financial Management OR International Business OR MOOC		4	-	4	80	-	20	100	40	4
5.	Core	Research Methodology		4	-	4	80	-	20	100	40	4
				20	-	20	400	-	100	500	250	20

***** Semester End Examination which is mandatorily required to be appeared by every student

Note:

3. TH = Theory, CIE= Continuous Internal Evaluation
4. SEE for Theory as well as Practical examinations as mentioned above shall be conducted by the University for all semesters and the CIE shall be conducted by colleges on behalf of the University for all Semesters.

Master of Commerce (Business Studies)
Semester II

Sr. No.	Course Type	Subjects	Course Code	Teaching Scheme			Examination Scheme					Credits
				Total Hours Per Week			Max. Marks SEE (TH) *	Max Marks SEE (PR)	Max. Marks (CIE)	Total Marks	Min. Passing Marks	
				Theory	Practical	Total						
1.	Core	Indian Financial System		4	-	4	80	-	20	100	40	4
2.	Core	Company Law		4	-	4	80	-	20	100	40	4
3.	Core	Project Management		4	-	4	80	-	20	100	40	4
4.	Elective	Advanced Financial Management OR Basics of GST OR MOOC		4	-	4	80	-	20	100	40	4
5.	Core	On Job Training		-	8	8	-	100	-	100	50	4
				20	-	20	320	100	80	500	250	20

***** Semester End Examination which is mandatorily required to be appeared by every student

Note:

3. TH = Theory, CIE= Continuous Internal Evaluation
4. SEE for Theory as well as Practical examinations as mentioned above shall be conducted by the University for all semesters and the CIE shall be conducted by colleges on behalf of the University for all Semesters.

Master of Commerce (Business Studies)
Semester III

Sr. No.	Course Type	Subjects	Course Code	Teaching Scheme			Examination Scheme					Credits
				Total Hours Per Week			Max. Marks SEE (TH) *	Max Marks SEE (PR)	Max. Marks (CIE)	Total Marks	Min. Passing Marks	
				Theory	Practical	Total						
1.	Core	Human Resource Management		4	-	4	80	-	20	100	40	4

2.	Core	Service Sector Management		4	-	4	80	-	20	100	40	4
3.	Core	Cooperation and Rural Development		4	-	4	80	-	20	100	40	4
4.	Elective	Agricultural Economics OR Indian Banking System OR MOOC		4	-	4	80	-	20	100	40	4
5.	Core	Research Project		-	8	8	-	100	-	100	50	4
				16	8	24	320	100	80	500	250	20

***** Semester End Examination which is mandatorily required to be appeared by every student

Note:

1. TH = Theory, CIE= Continuous Internal Evaluation
2. SEE for Theory as well as Practical examinations as mentioned above shall be conducted by the University for all semesters and the CIE shall be conducted by colleges on behalf of the University for all Semesters.

Master of Commerce (Business Studies)
Semester IV

Sr. No.	Course Type	Subjects	Course Code	Teaching Scheme			Examination Scheme					Credits
				Total Hours Per Week			Max. Marks SEE (TH) *	Max Marks SEE (PR)	Max. Marks (CIE)	Total Marks	Min. Passing Marks	
				Theory	Practical	Total						
1.	Core	Entrepreneurship Development		4	-	4	80	-	20	100	40	4
2.	Core	Corporate Social Responsibility		4	-	4	80	-	20	100	40	4
3.	Core	Marketing Management		4	-	4	80	-	20	100	40	4
4.	Elective	International Marketing OR Insurance Procedures and Practices OR MOOC		4	-	4	80	-	20	100	40	4
5.	Core	Research Project		-	12	12	-	100	-	100	50	4
				16	12	28	320	100	80	500	250	20

***** Semester End Examination which is mandatorily required to be appeared by every student

Note:

1. TH = Theory, CIE= Continuous Internal Evaluation
2. SEE for Theory as well as Practical examinations as mentioned above shall be conducted by the University for all semesters and the CIE shall be conducted by colleges on behalf of the University for all Semesters.

Syllabus (Business Studies)

M.Com. Semester I

C1- Organization Behaviour

Course Outcomes (COs)/Learning Outcomes: On successful completion of this course, the learner will be able to -	
CO 1	To learn and understand Organization Behaviour theories and be able to apply them in business organization
CO 2	Compare and contrast job enlargement with job enrichment
CO 3	Evaluate roles of conflicts, power and politics in determining group behaviour
CO 4	Identify determinants of organization culture

Unit -I : Nature of Organization- Organizational Goals- Nature of Organizational behaviour- Historical evolution of organization behaviour

Unit II- Foundation of Individual behaviour- Personality: Concept, Theories, Determination, Personality and organization Behaviour- perception: Concept, Process, perception and organization behaviour- learning: concept, principles, learning theories and organizational behaviour- Attitudes, Values and Job satisfaction- basic motivational concepts: concept Theories- Application of concepts of motivation: job enlargement, Enrichment, Job rotation

Unit III- foundation of Group behaviour- small groups in organization- leadership: nature , theories- power and politics :Bases of power, Ethics of power and politics- communication: Channels, barriers Conflicts: concept, goals, conflict levels

Unit IV- Organizational Culture- Human resources policies and practices: job analysis, training and development, industrial relation- work stress: concept, sources of stress , coping stress- organizational changes and development- organizational effectiveness

Reference books

1. K. Aswathappa , organizational Behaviour(Himalaya publishing house, Mumbai)
2. L.M. Prasad, organizaional Behaviour (Sultan chand and sons,
New Delhi)
3. Shukla , Madhukar, Understand Organizations: organization theory and practice in India (Prentice Hall, New Delhi)

Question paper pattern

Time - 3 Hrs Max. Marks -80

Q. 1 A) Unit I ---------- 8 Marks

B) Unit I ---------- 8 Marks

OR

C) Unit I ---------- 16 Marks

Q2. A) Unit II ---------- 8 Marks

B) Unit II ---------- 8 Marks

OR

C) Unit II ---------- 16 Marks

Q.3. A) Unit III ---------- 8 Marks

B) Unit III ---------- 8 Marks

OR

C) Unit III ---------- 16 Marks

Q.4. A) Unit IV ---------- 8 Marks

B) Unit IV ---------- 8 Marks

OR

C) Unit IV ---------- 16 Marks

Q.5. A) Unit I ---------- 4 Marks

B) Unit II---------- 4 Marks

C) Unit III---------- 4 Marks

D) Unit IV---------- 4 Marks

C 2 – Business Laws

Unit I-

Course Outcomes (COs)/Learning Outcomes: On successful completion of this course, the learner will be able to -	
CO 1	To learn and understand various provisions of Business laws , and its application
CO 2	Analyze the provisions of Contract Act in context of business organizations
CO 3	Analyze the provisions of Indian Negotiable Act
CO 4	Evaluate the implications of provisions of Cyber Laws

1) Indian contract Act 1872-meaning of contract, Essentials of a valid contract, proposal and its acceptance, characteristics of an offer, offer and Invitation to make an offer , Offer and intention to offer , important rules for valid offer, Revocation of Offer, Acceptance, Singes of Acceptance, Revocation of acceptance, Agreement and kinds of
Agreements, Contractual Capacity, free Consent, Misrepresentation , Mistake, lawful Consideration, Lawful object, Expressly void agreements, Contingent Contracts, Discharge or termination of contracts, Implied or Quasi contracts, consequences of Breach of contract.
Special Contracts- Contracts of Indemnity- Contracts of Guarantee-

Contracts of sailment and Pledge - Contracts of Agency

2) Patent Act-2002- Meaning, Objective and important definition, inventions not patentable, patent office and power controller, penalties.

Unit II

1) Negotiable Instruments Act 1881- meaning, presumptions, promissory note and types, bill of exchange, cheque, Types of negotiable instruments, Hundi, negotiation, endorsement, Parties to negotiable instruments and their liability, holder and holder in due course, presentment of negotiable instrument, dishonour of negotiable instrument, noting and protesting of instrument, discharge from liability.
2) Indian partnership Act-1932- Meaning of partnership, Characteristics of partnership, Partnership deed, registration of Partnership, types of partnership firms, types of partners, incoming and outgoing partners, mutual relations and rights of partners, relationship to third party of partnership firm, extension and restrictions of partners implied authority, dissolution of partnership firm.

Unit III

1) Right to Information Act-2005- Background of the Act, important
Definitions, request to get information, Central information commission, State information commission, Rights and functions of information commission,

2) Cyber law-2000 -important Definitions, Digital signature, Electronic Governance, Creation, acceptance and sending of electronic documents, Cyber appellate Tribunal, cyber-crime.

Unit IV

1) Indian Industrial Act-1948 - Need of labour legislation, important definition, approval, licensing and registration of factories provisions regarding workers health, safety, welfare, adult, women and young workers, annual leave and wages ,other provisions.

2) Workmen's compensation Act-1923- important definition, rules related to workmen's compensation, calculation of amount of compensation.

3) Environment protection Act 1986- Meaning Objective and scope, power of central government to protect and improve environment, location of industries, process and operations, offenses and penalties.

Reference Books:

1. Avtar Singh, Mercantile Law, Eastern Book Company
2. Chandra Bose, Business Laws, PHI, 2008
3. Bulchandani, Business Law for Management, 2009, Himalaya Publishing

4. Kumar, Legal Aspect of Business 1st, ed. 2009, Cengage Learning
5. Taxman's General and Commercial Laws, 2009
6. M.C. Kuchhal Business Legislation for Management 2nd ed. Vikas Publishing

Question paper pattern

Time - 3 Hrs Max. Marks -80

Q. 1 A) Unit I ---------- 8 Marks

B) Unit I ---------- 8 Marks

OR

C) Unit I ---------- 16 Marks

Q2. A) Unit II ---------- 8 Marks

B) Unit II ---------- 8 Marks

OR

C) Unit II ---------- 16 Marks

Q.3. A) Unit III ---------- 8 Marks

B) Unit III ---------- 8 Marks

OR

C) Unit III ---------- 16 Marks

Q.4. A) Unit IV ---------- 8 Marks

B) Unit IV ---------- 8 Marks

OR

C) Unit IV ---------- 16 Marks

Q.5. A) Unit I ---------- 4 Marks

B) Unit II---------- 4 Marks

C) Unit III---------- 4 Marks

D) Unit IV---------- 4 Marks

C 3 Managerial Economics

Course Outcomes (COs)/Learning Outcomes: On successful completion of this course, the learner will be able to -	
CO 1	Distinguish between the domains of micro and macro economics and their applications in business world
CO 2	Determine factors affecting demand for a particular commodity and be able to ascertain demand in a given condition
CO 3	Identify various elements of cost and relate the same with output and revenue under a given market condition
CO 4	Determine the factors causing business cycles and be able to identify the business cycle stage with given economic indicators

Unit I : Nature of Managerial economics

Meaning, definition, nature, scope and significance , Factor influencing decisions, functions, role & responsibilities of Managerial economist.

Principles of managerial decision analysis.

Macro -Micro economics- Definition, scope, merits & demerits, importance and uses, limitations, paradox of micro economics, difference between micro and macro economics.

Unit II: Demand Analysis

Theories in demand, derivation of demand, types, environment influencing demand.

Elasticity of demand- concept, meaning, types, measurement, influencing factors, importance, advertising or Promotional elasticity. Demand forecasting- meaning, definition, types, methods, importance, advantages and limitations

Unit III : Production

Concept, meaning, definition features of production, functions , law of variable productions, production with two variable inputs.

Cost analysis- concept, importance, types, real, opportunity, economic, fixed, variable, direct, indirect, Total, average, marginal cost in short run & long run curve.

Revenue- concepts, definition, types, Total average and marginal revenue with AR & MR

Unit IV: Market Structure

Concept, meaning, Classification of markets, Perfect competition-

Features & price determinations , Monopoly- Features & price determinations, monopolistic competition-Features & price determinations, Pricing, price discrimination.

Business cycle- concept, definition, features, types, phases of business cycle, cobweb, Hicks, Samulson theories of trade cycle, controls of business cycle. Concept of sustainable development.

Reference Books

1. Managerial Economics, P.L. Mehta, Sultan Chand & Sons, New Delhi
2. Managerial Economics, Dwidevi, TMH
3. Indian Economics, Mishra & Puri, Himalaya Publishing House

Question Paper pattern

Time - 3 Hrs Max. Marks -80

Q. 1 A) Unit I ---------- 8 Marks

B) Unit I ---------- 8 Marks

OR

C) Unit I ---------- 16 Marks

Q2. A) Unit II ---------- 8 Marks

B) Unit II ---------- 8 Marks

OR

C) Unit II ---------- 16 Marks

Q.3. A) Unit III ---------- 8 Marks

B) Unit III ---------- 8 Marks

OR

C) Unit III ---------- 16 Marks

Q.4. A) Unit IV ---------- 8 Marks

B) Unit IV ---------- 8 Marks

OR

C) Unit IV ---------- 16 Marks

Q.5. A) Unit I ---------- 4 Marks

B) Unit II---------- 4 Marks

C) Unit III---------- 4 Marks

D) Unit IV---------- 4 Marks

E-1 - Fundamentals of Financial Management

Course Outcomes (COs)/Learning Outcomes: On successful completion of this course, the learner will be able to -	
CO 1	Determine the working capital requirement for an organization in a given situation
CO 2	Calculate Weighted Average Cost of Capital for a given Debt-Equity Mix
CO 3	Analyze the impact of capital structure on profitability of organization
CO 4	Select the appropriate investment option from a given choice to ensure maximum profit

Unit I: Financial Management: An Introduction:
Meaning, scope, objectives, and significance of financial management.

Responsibilities of financial executives, Sources of finance. (Theory)

Working Capital Management: Meaning, needs, types, Determinants of Working Capital, assessment of working capital requirement. *(Theory and Numerical)*
Leverage Analysis: Meaning and concept, types of leverages (Operating leverage, Financial Leverage, Combined Leverage). *(Theory and*

Numerical)

Unit II: Cost of Capital (Financing Decision): Cost of Capital: Meaning and concept, Significance, Factors affecting the cost of capital, cost of different sources of financing (Debt or debenture, Equity shares, Preference shares, Retained Earnings). The weighted average cost of capital. *(Theory and Numerical)*

Unit III: Capital Structure: Meaning and concept, components, principles, factors affecting the capital structure, Theories of capital structure (Net Income Approach, Net Operating Income Approach, Traditional Approach, Modigliani -Miller Approach). EBIT-EPS analysis. (*Theory and Numerical)*

Unit IV: Capital Budgeting (Investment Decision):
Meaning, features, significance, Types, difficulties in capital budgeting, meaning and Types of cash flow, Meaning and types of depreciation, Discounting of future cash flow, Discounted and Non discounted
Techniques of capital budgeting (Accounting Rates of Return, Payback

Period, Discounted payback period, Net Present Value, Profitability Index, Internal Rates of Return). (*Theory and Numerical)*

Reference Books:
1. Atrill, P; Financial Management for Non-Specialists, Prentice Hall.
2. Besant Raj. A: Corporate Financial Management, Tata McGrow Hill.
3. Block & Hirt: Foundation of Financial Management, Irwin Homewood.
4. Cooper, Kaplani and E: mastering Finance, Financial Times
5. Boltmam & Conn: Essentials of Managerial Finance, Hongnton & Mifflin.
6. Brealy, R. A. and Myers, S: The principle of Corporate Finance, McGraw Hill Internal.
7. Brigham and Ehrhardi: Financial Management- Theory and Practice, Thompson.
8. Brigham and Houston: Fundamentals of Financial Management, Thompson
9. Chandra Prasanna: Financial Management, Tata McGraw.

Question Paper Pattern

Time - 3 Hrs Max. Marks -80

Q.1- A) Unit I ----------8 marks (Theory) B)Unit I ----------8 Marks (Numeric)

OR

C)Unit I ----------16 Marks(Numeric)

Q.2- A) Unit II ----------8 marks (Theory)

B) Unit II ----------8 Marks (Numeric)

OR

C)Unit II ----------16 Marks (Numeric)

Q.3- A) Unit III ----------8 marks (Theory) B)Unit III----------8 Marks (Numeric)

OR

C)Unit III ----------16 Marks (Numeric)

Q.4- A) Unit IV ----------8 marks (Theory) B)Unit IV ----------8 Marks (Numeric)

OR

C)Unit IV ----------16 Marks (Numeric)

Q.5 A) Unit I ----------4 Marks (Theory)

B)Unit II---------- 4 Marks(Theory)

C)Unit III ---------- 4 Marks (Numeric)

D)Unit IV----------4 Marks (Numeric)

E-2- International Business

Course Outcomes (COs)/Learning Outcomes: On successful completion of this course, the learner will be able to -

CO 1	Determine factors international business environment
CO 2	Critically evaluate International Trade Theories
CO 3	Analyze impact of globalization on international business of a developing economy under a given foreign trade policy
CO 4	Evaluate the role of developing countries in Regional Economic Integration

Unit I :Concepts and Dimensions,

Concept of International Business, Difference between domestic and

International Business ,Nature and Importance of International business Introduction to International Business Environment. –Nature ,Modes of entry in International Business, Theories of International Trade., Balance of Payments.

Unit II : International Trade Theory

Absolute advantage theory, Law of Comparative advantage, Opportunity Cost Theory: Production Possibility Curve with opportunity costs and relative commodity prices basis and gains from trade under constant costs. Production Possibility Curve with increasing costs, Community Indifference Curve, Equilibrium in Isolation

Unit III

Trends in International Business : Cold War Era and Globalization- Change in Compositional significance of Trade and Foreign Direct Investment (FDI) under Globalization - SEZs and their Significance. Foreign Exchange Market and BoP: Demand and Supply of Foreign

Exchange -- Significance of Marshall-Lerner Condition in Supply of Foreign Exchange. · International Business Operations: Global manufacturing; Global marketing management; Global human resource management, Global business citizenship.

Unit IV

World Trade Organization GATT to WTO, Functions and Principles of

WTO, WTO and Developing Countries. Dispute Settlement Mechanism. · Regional Economic Integration: Tariff and its Impact - Tariff and Non tariff Barriers to Trade - EU, ASEAN and SAARC. Recent Trade Rounds and Position of India.

Reference Books

· Chacholiades Miltiades, International Economics, McGraw Hill.

· Hill Charles WL and Jain A.K., International Business, Tata McGraw Hill. · Markusen, Melvin, Kaemfer and Maskus, International Trade Theory and Evidence, McGraw Hill.

· Rugman and Hodgetts, International Business: A Strategic Management Approach, Pearson.

· Taggart, James, H. and McDermott Michael C., The Essence of

International Business, Prentice Hall

Question Paper Pattern

Time - 3 Hrs Max. Marks -80

Q. 1 A) Unit I ---------- 8 Marks

B) Unit I ---------- 8 Marks

OR

C) Unit I ---------- 16 Marks

Q2. A) Unit II ---------- 8 Marks

B) Unit II ---------- 8 Marks

OR

C) Unit II ---------- 16 Marks

Q.3. A) Unit III ---------- 8 Marks

B) Unit III ---------- 8 Marks

OR

C) Unit III ---------- 16 Marks

Q.4. A) Unit IV ---------- 8 Marks

B) Unit IV ---------- 8 Marks

OR

C) Unit IV ---------- 16 Marks

Q.5. A) Unit I ---------- 4 Marks

B) Unit II---------- 4 Marks

C) Unit III---------- 4 Marks

D) Unit IV---------- 4 Marks

Syllabus (Business Studies)

M.Com Semester II

C-1- Indian Financial System

Course Outcomes (COs)/Learning Outcomes: On successful completion of this course, the learner will be able to -

CO 1	Compare and Contrast roles of various components of financial system
CO 2	Analyze the role of banks with respect to credit creation and assess impact on economic development
CO 3	Assess the impact of privatisation of insurance companies on penetration of insurance products
CO 4	Evaluate the role of regulatory bodies in capital market operations

Unit I : Components of formal financial system

Structure and functions of financial structure, Nature and role of financial institutions and financial markets, financial system and economic development, pre and post scenario in financial system, reforms of financial structure , money market-nature, nature and operations of instruments, money market and Indian monetary policy

Unit II : Banking

Definition, characteristics , credit creation of banks current situation of Indian commercial banks , History of commercial banks , types of banks, Managerial functions of banks, deposits and loan management, procedure of loan, types of loan, principles of bank, limitations of credit creation , investment of bank Government securities, financial management of bank, accounts of bank, management of wealth, services of bank.

Unit III: Insurance

History of insurance , meaning and definition, importance and contribution to development, Insurance regulatory and authority Act 1999, current scenario of life insurance after privatization, Impact of privatization of insurance companies , Scope of life insurance marketing,

Nature of Insurance, policy contract, organization structure of Life Insurance corporation in India, Distribution channel of LIC of India, GIC products.

Unit IV : Capital market

Role, History, changes of capital market, primary market, stock exchange and share market and its functions, services rendered by stock exchange, Role of stock exchange in capitalize economy , listing of securities, Indian Stock market -its structure and functions, Indian Depository Act, Mutual Fund and its role in Indian Economical development, Regulatory bodies and services- SEBI, RBI, CRISIL, SHCIL, Exim bank, Foreign exchange market.

Reference Books

1. V.Avadhani, Indian capital market, First Edition, Himalaya publishing Home.
2. H.R.Machiraju, Merchant banking, third Edition, New age international publishers.
3. Ruddar Datt & K.P.M.Sundharam, Indian Economy,

Fortieth Revised Edition, S.Chand & Co.Ltd.,
4. M.Y.Khan, Indian financial system, Fourth Edition, Tata mcgraw Hill.

Question Paper Pattern

Time - 3 Hrs Max. Marks -80

Q. 1 A) Unit I ---------- 8 Marks

B) Unit I ---------- 8 Marks

OR

C) Unit I ---------- 16 Marks

Q2. A) Unit II ---------- 8 Marks

B) Unit II ---------- 8 Marks

OR

C) Unit II ---------- 16 Marks

Q.3. A) Unit III ---------- 8 Marks

B) Unit III ---------- 8 Marks

OR

C) Unit III ---------- 16 Marks

Q.4. A) Unit IV ---------- 8 Marks

B) Unit IV ---------- 8 Marks

OR

C) Unit IV ---------- 16 Marks

Q.5. A) Unit I ---------- 4 Marks

B) Unit II---------- 4 Marks

C) Unit III---------- 4 Marks

D) Unit IV---------- 4 Marks

C-2- Company Law

Course Outcomes (COs)/Learning Outcomes: On successful completion of this course, the learner will be able to -	
CO 1	Exemplify the procedure for formation of a company

CO 2	Compare and Contrast the provisions regarding issue of equity share capital with preference share capital
CO 3	Draft a notice and agenda for Annual General Meeting
CO 4	Understand provisions related to appointment of directors and auditors

Unit I

Introduction of company Act 2013, Formation of companies, public and private and one person companies, procedure for formation of company., Memorandum of association, articles of association, alteration of MOA and AOA, conversion of companies already registered., Prospectus, public offer and private placement, Shelf prospectus and red hearing prospectus, allotment of securities by the company, private placement- offer and invitation.

Unit II

Kinds of share capital, Issue of sweat equity shares, Issue and redemption of preference shares, transfer and transmission of securities, further issue of share capital, rights issue, issue of bonus shares, Provisions relating acceptance to deposits from public, Registration of charges including punishment for contravention

Unit III

Register of members, annual return, meetings of shareholders, annual general meeting, extra ordinary general meeting, notice of meeting and explanatory statement, quorum for meetings, ordinary and special resolutions., Meetings of boards, quorum of board meetings, minutes of meetings, notice, agenda, passing resolution of circulation, audit committee, powers of board, loan to directors, loans and investments by the company, related party transaction.

Unit IV

Appointment , registration and removal of auditors, Qualifications and disqualifications of Auditors, Appointment , registration and removal of Directors, Qualifications and disqualifications of directors, vacation of office, number of directorship, Directors report, Provisions relating to additional director, alternate directors, nominee directors, independent directors, appointment of managing directors, whole time director, Key managerial person, secretarial audit, functions of company secretary.

Reference Books:

1. A.K. Mujumdar, Dr. G.K. Kapoor, Company Law and Practice; Taxmann, 59/32, New Rohtak Road, New Delhi-110 005.
2. M.C. Kuchhal : Modern Indian Company Law; Shri Mahavir Book Depot, 2603, NaiSarak, Delhi-110 006.
3. A. Ramaiya : Guide to the Companies Act; Lexis Nexis, Butterworths Wadhwa, Nagpur
4. Study Material Executive Programme - Company Law- Paper One , 2018, by ICSI

Question Paper Pattern

Time - 3 Hrs Max. Marks -80

Q. 1 A) Unit I ---------- 8 Marks

B) Unit I ---------- 8 Marks

OR

C) Unit I ---------- 16 Marks

Q2. A) Unit II ---------- 8 Marks

B) Unit II ---------- 8 Marks

OR

C) Unit II ---------- 16 Marks

Q.3. A) Unit III ---------- 8 Marks

B) Unit III ---------- 8 Marks

OR

C) Unit III ---------- 16 Marks

Q.4. A) Unit IV ---------- 8 Marks

B) Unit IV ---------- 8 Marks

OR

C) Unit IV ---------- 16 Marks

Q.5. A) Unit I ---------- 4 Marks

B) Unit II---------- 4 Marks

C) Unit III---------- 4 Marks

D) Unit IV---------- 4 Marks

C-3- Project Management

Course Outcomes (COs)/Learning Outcomes: On successful completion of this course, the learner will be able to -	
CO 1	Determine the factors of project environment and list out the essentials of project management
CO 2	Determine the optimum capital structure for a project
CO 3	Evaluate applicability and efficiency various control tools for effective project management
CO 4	Design and demonstrate the project execution plan for a given project

Unit I: **Introduction**

Introduction to project and project management. Characteristics and types of projects. Gaining importance, project life cycle and its phases. Project management, Project manager and his responsibilities. phases of Project management, Project environment, the 7S of Project management.

Unit II: Project Finance

Financial feasibility, determinants of cost of project, its financing and deciding optimum capital structure. Cash flows from project and owner's perspective. Project Appraisal. Financial feasibility with risk. Types of risk, techniques of risk evaluation and its mitigation

Unit III: **Project Analysis**

Time planning, Contents of Project plan, planning process, Work breakdown structure, process mapping. Project Budgeting: Financial Projections, time value of money, cost of capital, Appraisal criteria, , project control –scope/progress control, performance control, schedule control and cost control

Unit IV: **Project Implementation**

Organizing human resources, systems and procedure for project implementation. Working of systems, Design of systems, project work system design, work breakdown structure, project execution plan, project control system, project diary

Reference Books

1. Clifford F Gray, Erik W Larson, “Project Management-The Managerial Process” Mcgraw-Hill

2. Prasanna Chandra, Projects Planning Analysis selection, financing, Implementation, McGraw Hill

3. S.Choudhury, Project Management Tata McGraw Hill publishing.,

4. Vasanth Desai, Project Management, Himalaya Publishing House

5 Goel B.B. Project Management, Deep & Deep Publications Pvt. Ltd

Question Paper Pattern

Time - 3 Hrs Max. Marks -80

Q. 1 A) Unit I ---------- 8 Marks

B) Unit I ---------- 8 Marks

OR

C) Unit I ---------- 16 Marks

Q2. A) Unit II ---------- 8 Marks

B) Unit II ---------- 8 Marks

OR

C) Unit II ---------- 16 Marks

Q.3. A) Unit III ---------- 8 Marks

B) Unit III ---------- 8 Marks

OR

C) Unit III ---------- 16 Marks

Q.4. A) Unit IV ---------- 8 Marks

B) Unit IV ---------- 8 Marks

OR

C) Unit IV ---------- 16 Marks

Q.5. A) Unit I ---------- 4 Marks

B) Unit II---------- 4 Marks

C) Unit III---------- 4 Marks

D) Unit IV---------- 4 Marks

E-1- Advanced Financial Management

Course Outcomes (COs)/Learning Outcomes: On successful completion of this course, the learner will be able to -	
CO 1	Prepare a Cash Budget and determine optimal cash balance in a given situation
CO 2	Determine various costs of receivables & payables and frame cost-effective Receivables Management Policy
CO 3	Prepare a Cash Flow Statement of an organization for a given situation
CO 4	Analyze the impact of dividend decisions under various dividend payout and retention ratios

Unit 1: Management of cash and marketable securities

Meaning of Cash Management, Motives of Holding Cash, Objective of cash management, Management of Cash Balance (Setting cash Balance, Cash Cycle, Zero Balance Account, Money Market Banking, Petty Cash (Imprest System), Meaning and types of Float, Management of Float, Meaning and types of Marketable Securities, Cash Management Planning with cash Budget, Cash Management Model (Baumols Model, Moller -Orr Model). *(Theory and Numerical)*

Unit 2: Debtors (Receivables) and Creditors Management:

Meaning of Receivables, Cost of receivables, credit policy and evaluation of debtors, Cash Discount policy and ascertainment of cost of cash discount, Effective cost of bills discounting,
Meaning of Creditors, calculation of cost of credit. *(Theory and Numerical)*

Unit 3:

Cash Flow Analysis

Meaning, Cash flow activities, significance of Cash flow statement and disadvantages. Preparation of Cash Flow Statement (Operating, Investing, Financial Activities) *(Theory and Numerical)*

Unit 4:

Retention Policy (Dividend Decision):

Meaning and concept of dividend, Meaning and concept of retained earnings, importance of dividend, Factors affecting dividend decision, Types of dividends, Dividend and valuation of the firm, Relevance model of dividend policy (Walters Model, Gordons Model), Irrelevance model of dividend policy (Residual Theory, Modigliani and miller theory).
Stability of Dividends, Bonus shares. *(Theory and Numerical)*

Reference Books:

1. Damodaran Aswath: Applied Corporate Finance, Wiley Student Edition
2. E. J. Mclancy: “Business Finance: Theory and Practice”. Pearson Education.
3. Gitmam, L. J.: Principles of Management Finance, Addision-Wasley
4. Higgins, R. C: Analysis on Financial Management, Irwin, McGraw Hill
5. Hompton, John: Financial Decision making: Concept, problem & Cases, Prentice hall India.
6. Joseph, P. Ogden, Frank.C.Jen and Philip, F.O’Conner : Advanced Corporate Finance:Policies and Strategies, Pearson Education
7. Khan & Jain: Financial Management, Tat McGraw

Question Paper Pattern

Time - 3 Hrs Max. Marks -80

Q.1- A) Unit I ----------8 marks (Theory) B)Unit I ----------8 Marks (Numeric)

OR

C)Unit I ----------16 Marks (Numeric)

Q.2- A) Unit II ----------8 marks (Theory)

B) Unit II ----------8 Marks (Numeric)

OR

C) Unit II ----------16 Marks (Numeric)

Q.3- A) Unit III ----------8 marks (Theory) B)Unit III----------8 Marks (Numeric)

OR

C)Unit III ----------16 Marks (Numeric)

Q.4- A) Unit IV ----------8 marks (Theory) B)Unit IV ----------8 Marks (Theory)

OR

C)Unit IV ----------16 Marks (Numeric)

Q.5 A) Unit I ----------4 Marks (Theory)

B)Unit II---------- 4 Marks (Theory)

C)Unit III ---------- 4 Marks (Numeric)

D)Unit IV----------4 Marks (Numeric)

E-2- Basics of GST

Course Outcomes (COs)/Learning Outcomes: On successful completion of this course, the learner will be able to -	
CO 1	To learn and understand GST Law, and its application
CO 2	Determine the value of taxable goods and services and Input Tax Credit
CO 3	Understand provisions related to compliances under GST Act
CO 4	Understand provisions related to demand and appeals

Unit I :

GST - The Road Begins -Draft Model GST Law - Positives –Negatives- LEVY - Territorial jurisdiction of GST - Taxable Event - Consideration - Levy and collection of GST - Composition levy - PLACE AND TIME OF SUPPLY - Definitions of Goods & Services - Time of supply.

Unit II

VALUATION - Value of taxable goods and services- Valuation Rules SPECIAL TRANSACTIONS - Job work - Electronic Commerce -INPUT TAX CREDIT - Input tax credit - Input Service Distributor -REFUNDS - Refund Interest on refund.

Unit III

COMPLIANCES - Registration - Invoices, credit and debit notes - Payment of tax - Tax deducted at source - Returns - Accounts and Records -

ASSESSMENT, AUDIT AND INSPECTION - Assessment - Audit - Inspection - INTEREST, PENALTY AND PROSECUTION - Interest - Offences and Penalties – Prosecution.

Unit IV

DEMAND AND APPEALS - Demand - Appeals - CGST - SGST -GISTALTERNATE DISPUTE RESOLUTION MECHANISM - Authority of Advance

Ruling - Settlement of cases. - Recovery of tax - Liability to pay tax in specified cases - TRANSITIONAL PROVISIONS -Transitional Provisions.

Reference Books:

1. Indirect Tax, RG Saha, Usha Devi N, Himalaya Publication House
2. Goods and Service Tax, HC Mehrotra, Sahitya Bhavan Publication, Agra
3. GST Ready Reckoner, VS Date, Taxmann

Question Paper Pattern

Time - 3 Hrs Max. Marks -80

Q. 1 A) Unit I ---------- 8 Marks

B) Unit I ---------- 8 Marks

OR

C) Unit I ---------- 16 Marks

Q2. A) Unit II ---------- 8 Marks

B) Unit II ---------- 8 Marks

OR

C) Unit II ---------- 16 Marks

Q.3. A) Unit III ---------- 8 Marks

B) Unit III ---------- 8 Marks

OR

C) Unit III ---------- 16 Marks

Q.4. A) Unit IV ---------- 8 Marks

B) Unit IV ---------- 8 Marks

OR

C) Unit IV ---------- 16 Marks

Q.5. A) Unit I ---------- 4 Marks

B) Unit II---------- 4 Marks

C) Unit III---------- 4 Marks

D) Unit IV---------- 4 Marks

M.COM (Industrial Relations and Personnel Management)
W.E.F.2023-24

Program Specific Outcomes

PSO 1	Develop necessary professional knowledge and skills in Labour Laws and Industrial Relations
PSO 2	Demonstrate the ability to interpret various provisions of labour laws
PSO 3	Demonstrate effective oral and written communication required for industrial relations
PSO 4	Implement traditional and modern strategies and practices of industrial relations and labour laws
PSO 5	Develop competency in students to make them employable in the labour relations domain

Teaching and Examination Scheme

A teaching and examination scheme for students admitted to the M. Com. (Industrial Relations and Personnel Management) Program shall be as follows:

Master of Commerce (Industrial Relations and Personnel Management)
Semester I

Sr. No.	Course Type	Subjects	Course Code	Teaching Scheme			Examination Scheme					Credits
				Total Hours Per Week			Max. Marks SEE (TH) *	Max Marks SEE (PR)	Max. Marks (CIE)	Total Marks	Min. Passing Marks	
				Theory	Practical	Total						
1.	Core	Industrial Psychology		4	-	4	80	-	20	100	40	4
2.	Core	Labour Laws – I		4	-	4	80	-	20	100	40	4
3.	Core	Industrial and Labour Economics		4	-	4	80	-	20	100	40	4
4.	Elective	Public System Management OR Organizational Behaviour OR MOOC		4	-	4	80	-	20	100	40	4
5.	Core	Research Methodology		4	-	4	80	-	20	100	40	4
				20	-	20	400	-	100	500	250	20

***** Semester End Examination which is mandatorily required to be appeared by every student

Note:

5. TH = Theory, CIE= Continuous Internal Evaluation

6. SEE for Theory as well as Practical examinations as mentioned above shall be conducted by the University for all semesters and the CIE shall be conducted by colleges on behalf of the University for all Semesters.

Master of Commerce (Industrial Relations and Personnel Management)
Semester II

Sr. No.	Course Type	Subjects	Course Code	Teaching Scheme			Examination Scheme					Credits
				Total Hours Per Week			Max. Marks SEE (TH) *	Max Marks SEE (PR)	Max. Marks (CIE)	Total Marks	Min. Passing Marks	
				Theory	Practical	Total						
1.	Core	Industrial Relation and Trade Union Movement		4	-	4	80	-	20	100	40	4
2.	Core	Labour Laws – II		4	-	4	80	-	20	100	40	4
3.	Core	Labour Cost and Compensation Management		4	-	4	80	-	20	100	40	4
4.	Elective	Global Human Resource Management OR Organizational Development and Quality Management System OR MOOC		4	-	4	80	-	20	100	40	4
5.	Core	On Job Training		-	8	8	-	100	-	100	50	4
				20	-	20	320	100	80	500	250	20

***** Semester End Examination which is mandatorily required to be appeared by every student

Note:

1. TH = Theory, CIE= Continuous Internal Evaluation
2. SEE for Theory as well as Practical examinations as mentioned above shall be conducted by the University for all semesters and the CIE shall be conducted by colleges on behalf of the University for all Semesters.

Master of Commerce (Industrial Relations and Personnel Management)
Semester III

Sr. No.	Course Type	Subjects	Course Code	Teaching Scheme			Examination Scheme					Credits
				Total Hours Per Week			Max. Marks SEE (TH) *	Max Marks SEE (PR)	Max. Marks (CIE)	Total Marks	Min. Passing Marks	
				Theory	Practical	Total						
1.	Core	Industrial Safety Management		4	-	4	80	-	20	100	40	4
2.	Core	Labour Laws – III		4	-	4	80	-	20	100	40	4
3.	Core	Employee Relations and Engagement		4	-	4	80	-	20	100	40	4
4.	Elective	Strategic Human Resource Management OR Current Trends in HR Practices OR MOOC		4	-	4	80	-	20	100	40	4
5.	Core	Research Project		-	8	8	-	100	-	100	50	4
				16	8	24	320	100	80	500	250	20

***** Semester End Examination which is mandatorily required to be appeared by every student

Note:

1. TH = Theory, CIE= Continuous Internal Evaluation
2. SEE for Theory as well as Practical examinations as mentioned above shall be conducted by the University for all semesters and the CIE shall be conducted by colleges on behalf of the University for all Semesters.

Master of Commerce (Industrial Relations and Personnel Management)
Semester IV

Sr. No.	Course Type	Subjects	Course Code	Teaching Scheme			Examination Scheme					Credits
				Total Hours Per Week			Max. Marks SEE (TH) *	Max Marks SEE (PR)	Max. Marks (CIE)	Total Marks	Min. Passing Marks	
				Theory	Practical	Total						
1.	Core	Legal Aspects in Environment Safety		4	-	4	80	-	20	100	40	4
2.	Core	Labour Laws – IV		4	-	4	80	-	20	100	40	4
3.	Core	Ethics in HRM		4	-	4	80	-	20	100	40	4

4.	Elective	Human Resource Information Systems OR Human Resource Accounting and Audit OR MOOC		4	-	4	80	-	20	100	40	4
5.	Core	Research Project		-	12	12	-	100	-	100	50	4
				16	12	28	320	100	80	500	250	20

* Semester End Examination which is mandatorily required to be appeared by every student

Note:

1. TH = Theory, CIE= Continuous Internal Evaluation
2. SEE for Theory as well as Practical examinations as mentioned above shall be conducted by the University for all semesters and the CIE shall be conducted by colleges on behalf of the University for all Semesters.

Detailed Syllabus
M. Com. (Industrial Relations and Personnel Management)
Semester - I

CC01: Industrial Psychology

Course Outcomes

CO1	The students will be able **to relate** the concept of Psychology with Industry
CO2	The students will be able **to differentiate** types of psychology and will also able **to assess** impact of psychology on behaviours of individuals.
CO3	The students will be able **to conduct** psychological tests to measure and evaluate individual and group behaviour
CO4	The student will be able **to identify** determinants of group behaviour.
CO5	The students will be able **to apply** the concepts of psychology in Industrial Relations

Unit 1: Introduction of the term 'Industry' and 'Psychology' – Definitions – nature –importance – scope – factors responsible for psychology – behaviour of an individual in an industry – individual difference

Unit 2: Types of Psychology - Types and characteristics of psychology – factors responsible – mental psychology – its impact on behaviour – Difference between male and female psychology – its impact on behaviour – Differentiate between male and female psychology – its impact on efficiency – productivity etc.

Unit 3: Tests for Psychology - Effectiveness of these tests – Measures to control the tests steps to improve the psychology Individual Behaviour and Group Behaviours - Interaction between them – psychology involved in each individual – Necessary suggestions for improving psychology

Unit 4: Group Dynamics – Characteristics of group behaviour, Research Methodology for psychology, determinants of group behaviour, Concept of group climate, group behaviour models.

Reference Books:

1. Industrial/Organizational Psychology: An Applied Approach, 8th Edition, Michael G. Aamodt, 2016
2. Industrial/Organizational Psychology: Understanding the Workplace, 5th Edition, Paul E. Levy, 2017
3. Psychological Testing and Assessment, 9/e, Ronald Jay Cohen (Author), Mark E. Swerdlik (Author)
4. Group Dynamics and Team Building, R K Sadhu, Excel Books
5. Introduction to Psychology, Shashi Jain, Kalyani Publishers
6. Organizational Behaviour, 18e, Neharika Vohra Stephen P. Robbins, Timothy A. Judge (Author), Pearson Education

CC02: Labour Law - I

Course Outcomes

CO1	The students will be able **to understand** the definition of industry and will also be able **to identify** causes of industrial disputes.
CO2	The students will be able **to identify** causes and measures for strikes and lockouts in industries.
CO3	The students will be able **to understand** the provisions for restriction of unfair labour practices.
CO4	The student will be able **to comprehend** principles of natural justice.
CO5	The students will be able **to relate** various labour laws in Industrial Relations

Unit 1: Industrial Disputes Act, 1947 Definition of Industry, Workman and Industrial Dispute – Authorities under the Act – Procedure, Powers and Duties of Authorities

Unit 2: Strikes and Lock outs –Lay off and Retrenchment – Special Provision relating to Layoff, Retrenchment and Closure

Unit 3: Maharashtra Recognition of Trade Unions & Prevention of Unfair Labour Practices Act, 1971, All provisions of the Act (Entire Act)

Unit 4: The Industrial Employment (Standing Orders) Act, 1946 All provisions of the Act (Entire Act), Principles of Natural Justice

Reference Books:

1. P.L MALIK'S HANDBOOK OF LABOUR AND INDUSTRIAL LAW GENERIC BOOK
2. Industrial Law – J. K. Bareja, Galgotia Publications Pvt Ltd
3. Industrial Relations and Labour Laws for Managers SAGE Publications India Private Limited; First Edition
4. Labour laws for Managers – B.D. Singh
5. Industrial & Labour Laws – S. P. Jain, Dhanpat Rai & Co.; Standard Edition

CC03: Industrial & Labour Economics

Course Outcomes

CO1	The students will be able **to analyse** the concept of labour economics
CO2	The students will be able **to identify** causes and measures for unemployment problem and will also able **to evaluate** Govt programmes for unemployment solutions.
CO3	The students will be able **to differentiate** pre and post 1990-91 economic problems and measures taken up to solve them
CO4	The student will be able **to identify** role of financial institutions for enhancing industrial productivity.
CO5	The students will be able **to relate** the concepts of economic principles in Industrial Relations

Unit 1: Labour Economics, Nature and scope of Labour Economics-Rise of economic problems in Labour, Management, Wage Management, Nominal & real wages, factors affecting them-Wages, incentives, D.A. and other allowances, consumer prices index – Wage differentials

Unit 2: Labour Market: Labour market analysis – demand for and supply of labour determinants

of demand for and supply of labour – Mobility of labour – Problems for labour market – migratory, casual, probationary consequences of new information technology – Efficiency of Indian labour and effort to improve Nature, causes and measures to solve problems of unemployment – Employment Policy – different programmes undertaken by Govt. after independence to increase employment like IRDP, DPAP, NREP – Problems of Agricultural Labour, Child Labour and Female Labour

Unit 3: Industrial Economics, Nature and scope of Industrial Economics – Industrial development and economic Development – Changes in Indian Economy Policy after 1990-91 – Features and Economic problems of public sector employees - Profile of Industrial Sector – Public sector, Private Sector, Small Scale and Village Industries – Joint Sector and Co-operative Sector – Achievement and Problems faced – Industrial Location – Factors/ Determinants- Alfred Weber's Theory of Industrial Location

Unit 4: Industrial Finance – Need, Types, Short Term and Long-Term capital – Foreign exchange component – Role of Public Sector Banks and Private Sector Banks – Small scale industries and development of backward areas – Service Sector in India: Role, present position and problems – Challenges and Opportunities in Service Industries – Factors determining Industrial Productivity – Remedy to improve industrial productivity

Reference Books:

1. Principles of Economics by Robert H. Frant and Ben S. Bernanke, Publication – Tata McGraw – Hill
2. Labour Economics By Roy B. Helfgott Publication – Random House, New york
3. Economics of Labour and Industrial Relations by Dr. T. N. Bhagoliwal Publication – Sahitya Bhavan Publication
4. Labour Economics by F. Ray Marshall, Vernon M. Briggs, Jr. and Allan G. king Publication – Richard D. Irwin, INC
5. Labour Welfare, Trade Unionism and Industrial Relations by Punekar, Deodhar and Sankaran Publication – Himalaya Publishing House
6. Aspects of Labour Welfare and Social Security by A. M. Sarma Publication – Himalaya Publishing House

DSE01: Public System Management

Course Outcomes

CO1	The students will be able **to understand** the role of various public enterprises.
CO2	The students will be able **to assess** the importance of energy management and water management and will also be able **to suggest** measures for conservation of energy and water resources
CO3	The students will be able **to understand** the evolution of education system and telecom system in India
CO4	The student will be able **to differentiate** roles of local, regional and state agencies in infrastructural development
CO5	The students will be able **to relate** the functioning of various public enterprises in development of public utilities

Unit 1: Public Goods & services, Concept of Public System, Role of Government in Public System, Types of Public system, Weaknesses & Issues of the Public System in India. Public Enterprise Management - Objectives and Roles of Public Enterprise, Organizational Forms and Working of the Board of Management, Public Enterprise Policy and Reform Measures, Marketing Problems of Public Enterprises

Unit 2: Energy Management - Organisation for Energy Management: Goal setting in Energy Management; Energy crisis, energy use Patterns and scope for Conservation; Energy Audit, Energy Pricing; Non-conventional sources of energy; Utilization of solar energy; Biomass as a source of energy; The option of Nuclear energy in the developing countries; Water Resource Management - Objectives and organization of water resource Management; Optimization techniques for water resources projects; Scientific utilization of Agriculture water; irrigation projects; Water crisis management flood and droughts; Water harvesting; Problem relating to supply and timely use of water in cities and towns.

Unit 3: Education as Development Priority; Education and Economic growth; International Comparisons; Strategies of Development of Education System; Concept of Investment in Man; Systems of Education in India: Formal, informal, Primary, Secondary and Higher Education; Management of Telecommunication systems - Role of Telecommunication; Effects of technology and scale on cost of service, Organization, management and financing in Telecommunication; Mobilizing resources for expansion, Impact of Telecommunications on rural development, Cases: BEL, C-DOT, DoT, BSNL and Telecom Commission.

Unit 4: System analysis and system dynamics in health care; Health system: Characteristics, Planning methodologies, Goals and functions; Strategic management in health care; Quantitative foundations of

health services management; Public Infrastructure Management– Definition; Local, Regional, State and Federal Agencies responsible for infrastructure development and their role in Regional Planning Process; The role of Civic Organizations and Private Sector; Overview of the Infrastructure Management Process. Infrastructure Developments from Road Transport, Railways, Power, Airports and Shipping Ports like PWD, MSRDC, Central Railway, DLF, GMR, GVK, TATA Energy and Reliance Energy etc.

Reference Books:

1. "Ideas that have Worked" by Department of Administrative Reforms and Public Grievances, 2004, Penguin / Viking, New Delhi
2. "Infrastructure Management: Design, Construction, Maintenance, Rehabilitation, Renovation." Hudson, Haas, and Uddin, McGraw-Hill, 1997
3. Bureau of Public Enterprises. Public Enterprises Survey, 1994-95, New Delhi, 1996
4. Donglass, C. "Energy Technology Handbook". McGraw Hill, New York. 1977
5. Chaturvedi, T.N. (ed) "Training in Public Administration: The changing Perspectives". 1989. The Indian Institute of Public Administration, New Delhi
6. Chatuvedi, M.C. and Rogers P. "Water Resources Systems Planning: Some Case Studies for India. Indian Academy of Sciences, Bangalore, 1995. Indian Factories Act 1948, Universal Lexis Nexis.

DSE01: Organizational Behaviour

Course Outcomes

CO1	The students will be able **to relate** the role of organisational behaviour with productivity and managerial effectiveness.
CO2	The students will be able **to assess** the relationship of Perception, Attitudes, and Motivation with individual behaviour
CO3	The students will be able **to identify** the stages of team building and reasons of group conflicts and will also be **to evaluate** methods to resolve the group conflicts
CO4	The student will be able **to differentiate various** OD techniques and will also be able **to describe** the process of OD
CO5	The students will be able **to relate** the various concepts of organisational behaviour with development of industrial relations

Unit 1: Organizational Behaviour - The nature of organisations: Why do organisations exist? Components of organisations; Organisations as open systems, Managers in organisations, Productivity

and managerial performance, Value-added managers, the manager's challenge, Organisational behaviour and the new workplace, Managing the globalisation of work, managing human rights in the workplace, managing developments in information technologies, Managing organisational transitions, Managing new forms of Organisation. Biographical characteristics, ability, and learning

Unit 2: Perception: Introduction, Halo effect, Stereotyping, pigeonholing and compartmentalization; Self-fulfilling prophecy; Perceptual mythology; other influences on perception. Attitudes and values - Attitudes, Components of attitudes, Attitudes and behaviour: Attitudes and cognitive consistency, Job satisfaction as an attitude; development Values, Sources and types of values, Patterns and trends in values, Managing values and attitudes. Motivation: - Concepts, Theories of Maslow, Herzberg, McClelland, Porter & Lawler Model, Application of Motivation concept, Individual motivation and motivation in the organization, Cultural Differences in Motivation, Intrinsic and Extrinsic Motivation, Social Motivation, Motivation and Health, Role of motivation in human behaviour.

Unit 3: Foundations of group behaviour - The nature of groups: groups and teams, informal and formal groups, purpose of teams, Teams and team building: selecting team members, team roles, stages in team development, team building, team identity, team loyalty, commitment to shared beliefs, multi-disciplinary teams, Team Dynamics: group norms, decision-making behaviour, dysfunctional teams, Cohesiveness. Conflict – Substantive and emotional conflicts, Levels of conflict, Sources of conflict in organisations, Symptoms of conflict Causes of conflict, Strategies for the management of conflict.

Unit 4: Organizational Change - Nature, levels and dilemmas of change, Pressures for change, The Domino effect, Responses to change, Force field analysis, Change process, Resistance to change, Dynamics of change. Organizational Development - Goals of organisational development: Principles underlying organisational development, Ethical aspects of organisational development, The process of organisational development: Action research and organisational development, Organisational development interventions: Organisation-wide interventions, smaller group and intergroup interventions, Individual interventions. - Traditional: Grid Training, Survey Method; Modern: Process Consultation Method, Third OD Techniques Party, Team Building, Transactional Analysis.

Reference Books:

1. Organisation Behaviour, Fred Luthans McGraw-Hill Education; 12th edition
2. Organisation Behaviour, Stephen P. Robbins (Author), Timothy A. Judge (Author), Neharika Vohra (Author) Robbins, 18th Pearson Education Asia
3. Principles of Organizational Behaviour OUP Oxford; 4th edition. By Robin Fincham (Author), Peter Rhodes (Author)

4. Prentice Hall India Organisational Behaviour: Human Behaviour at Work Neustrom & Davis, 10th, Tata McGraw Hill
5. Organisational Behaviour: Individuals, Groups and Organisation Second Edition (Prentice Hall, 2002)

Semester - II

CC04: Industrial Relation & Trade Union Movement

Course Outcomes

CO1	The students will be able **to understand** the definition of trade union and will also be able **to identify** role of trade unions in industries.
CO2	The students will be able **to identify** causes and measures for industrial disputes
CO3	The students will be able **to understand** the concept of collective bargaining will also be able **to analyse** the importance of worker's participation in management.
CO4	The student will be able **to apply** grievance handling procedures.
CO5	The students will be able **to relate** trade union movement in developing industrial relations

Unit 1: Industrial Relations – Importance, Definition, Scope, Role and Impact on Labour Laws legislation, Execution, Employer, Trade Unions and Judiciary Trade Union – objectives, functions, New Role of Trade Union in the context of globalization, IT, trade and productivity.

Unit 2: Industrial dispute – nature & causes of industrial disputes Machinery for solving industrial disputes under Industrial Disputes Act, 1947 at national and state level Role of Judiciary & its impact on industrial relations

Unit 3: Collective bargaining – meaning, characteristics, need, importance, process, causes for failure of collective bargaining, Alternatives to collective bargaining, Importance of employee stock option plans. Worker's participation in management – concept, pre-requisites, forms & levels of participation, benefit of workers Participation in Management

Unit 4: Grievance handling procedure – labour management, Co-operation, role of functional manager including personnel & industrial relations manager in promoting & establishing peaceful industrial relations

Reference Books:

1. Dynamic Personnel Administration – Prof. M. N. Rudrabasavraj.

2. Personnel Management and Industrial relations – P. C. Shejwalkar andS. B. Malegaonkar
3. Labour Management relations in India – K.M. Subramanian
4. Trade Unionism Myth and Reality, New Delhi, Oxford University Press
5. Dynamic Personnel Administration – Prof. M.N. Rudrabasavraj.
6. Personnel Management and Industrial Relations – P. C. Shejwalkar and S. B. Malegaonkar

CC05: Labour Law - II

Course Outcomes

CO1	The students will be able **to apply** the of terms like Health, Working Hours, Annual Leaves, Wages etc for factory labour.
CO2	The students will be able **to identify** the provisions laid down in Bombay Shops and Establishment Act and will also be use regulations related to digital signature.
CO3	The students will be able **to understand** the provisions and regulations of contract labour and its practices.
CO4	The student will be able **to apply** principles of minimum and fair wages for labour force of an organisation.
CO5	The students will be able **to relate** various labour laws in Industrial Relations

Unit I: Factories Act, 1948, Approval, Licensing and registration – Inspecting Staff – Health –Welfare – Working Hours – Annual Leave with wages – Periodical Returns – Registers and Records

Unit II: Bombay Shops and Establishments Act, 1948, All provisions under the Act (Entire Act), Information Technology Act, 2000, Digital Signature – Electronic governance – Secure Digital Signature – Regulation of Certifying Authorities – Digital signature Certificates – Duties of Subscribes

Unit III: Contract Labour (Regulation and Abolition) Act, 1970, All provisions under the Act (Entire Act)

Unit IV: Payment of wages Act, 1936, All provisions under the Act (Entire Act)

Reference Books:

1. P.L MALIK'S HANDBOOK OF LABOUR AND INDUSTRIAL LAW GENERIC BOOK
2. Industrial Law – J. K. Bareja, Galgotia Publications Pvt Ltd

3. Industrial Relations and Labour Laws for Managers SAGE Publications India Private Limited; First Edition
4. Labour laws for Managers – B.D. Singh
5. Industrial & Labour Laws – S. P. Jain, Dhanpat Rai & Co.; Standard Edition

CC06: Labour Cost & Compensation Management

Course Outcomes

CO1	The students will be able **to understand** the concept of cost of labour and will also be able **to apply** cost benefit analysis with respect to labour deployment.
CO2	The students will be able **to compute** the ideal labour salary.
CO3	The students will be able **to differentiate** the concept of compensation and incentives.
CO4	The student will be able **to prepare** sound incentive schemes for employees.
CO5	The students will be able **to relate** the concepts of labour cost with labour compensation and incentives.

Unit I: Costs -Various concepts, Elements of cost, Cost Sheet-Orientation & understating of problems. Various Statutory Requirements related to Cost of Labour Cost Benefit Analysis of important HR functions

Unit II: Labour turnover & Productivity & Cost associated Ideal Labour Salary Calculations -Component deductions, disbursement & control

Unit III: Compensation, Elements of compensation, Principles of determination of compensation Incentives, its place in compensation.

Unit IV: Indian Industry, Practices of Incentives, Designing sound incentive scheme. Incentive Schemes for direct and indirect workers. Incentive schemes for employees in service industries

Reference Books:

1. Labour Cost and Compensation Management, Prof A P Rao, Everest Publishing House; 10th Edition
2. Labour Costing & Compensation Management, Dr. Pradip K Sinha, Nirali Publication
3. Cost Accounting: Texts and Problems; Shukla M.C. (Author), Grewal T.S. (Author), Gupta M.P (Author), S Chand & Company

DSE02: Global Human Resource Management

Course Outcomes

CO1	The students will be able **to relate** the societal culture with organisational culture.
CO2	The students will be able **to understand** the global HR ethics, values and principles for MNCs.
CO3	The students will be able **to understand and apply** the six sigma and ISO standard in HR policies and procedures
CO4	The student will be able **to apply** strategic HR decisions in global context.
CO5	The students will be able **to relate** the various HR concepts in global context for MNCs and international organisations.

Unit I: Strategic HRM – Global Business strategy – Managing HR for Competitive Advantage – Societal Culture – Impact of Societal Culture in mangers – Managers behaviour and employment relations – Relation between societal culture and organizational culture – Cross Cultural Management – communication across culture – different types of organization – Learning and stakeholder in organization – Cross cultural effect on various functions of HRM (Motivation – leadership- Teams)

Unit II: Global HR Orientation along with knowledge of Global Business Model – Strategy – process of Industry, Global HR ethics – values – principles – policies and processes in view of MNC and Fortune 500 Companies

Unit III: Global compensation computation practice along with productivity and performance management, Global Incentives Management System – Short-term long-term systems – Six Sigma process improvement in accordance with ISO standards processes and procedures. Cross Cultural Management – including communication (Language) –Lifestyle – Climatic and Environmental changes – global Socio-cultural factors– customs and traditions including personal – psychological and Individual determinants

Unit IV: Strategic Human Resource Management in the context to Global Scenario, Global HR Environment and strategizing the entire Global process – Global Reward and compensation Management – Global Training and Development Strategies – Global Performance Management system – Global Exit and Retrenchment Strategies, Mergers and Acquisitions – Implications of HR at Global level

Reference Books:

1. INTERNATIONAL HUMAN RESOURCE MANAGEMENT: GLOBALIZATION, NATIONAL SYSTEMS AND MULTINATIONAL COMPANIES, Tony Edwards (Author), Pearson Education; 1st edition
2. INTERNATIONAL HUMAN RESOURCE MANAGEMENT, 3RD EDITION, McGraw Hill Education (India)
3. International Human Resource Management, Peter J. Dowling (Author), Marion Festing (Author), Allen D. Engle (Author), Cengage India Private Limited
4. Executive Skills for Global Managers, Upendra Dhar and S Ravishankar, Himalaya Publishing House
5. International Business and Globalization (Contemporary Issues in Business & Globalization), D. John Daniels, Jeffrey A. Krug, SLE Pound; 1st edition

DSE02: Organisation Development & Quality Management System

Course Outcomes

CO1	The students will be able **to differentiate** the OD theories of various behavioural scientists.
CO2	The students will be able **to differentiate** the various change models.
CO3	The students will be able **to understand** the concepts of intergroup, self-managed teams and group behaviour modelling
CO4	The student will be able **to establish** the client consultant relationship.
CO5	The students will be able **to relate** the various OD concepts with various quality management for managing industrial relations

Unit I: Define the concept of OD, values, assumptions, importance. Evolution: Robert Tanenbaum, Kurt Lewin, McGregor, Herbert Shepard, Robert Blake Foundation of OD: action research, survey feedback, systems theory, teams and teamwork, participation and empowerment, applied behavioural science, parallel learning structures.

Unit II: Process of OD, change model, Berke and Litwin, Porras and Robertson. OD interventions: importance and meaning team interventions: role analysis, role Negotiation, appreciation and concern, inter-dependency

Unit III: Intergroup: Walton, principled negotiation, Structural: structural's, work redesign, quality, self-managed teams. Individual: t-group, behaviour modelling

Unit IV: Client consultant relationship, Identify major challenges in client consultant Relationship, Case lets / cases on: Problem identification, Implementation of intervention, Action research

Reference Books:

1. Organization Development: Accelerating Learning and Transformation, S. Ramnarayan (Author), Sage Response; Second edition
2. ORGANIZATION DEVELOPMENT: BEHAVIORAL SCIENCE INTERVENTIONS FOR ORGANIZATIONAL IMPROVEMENT, 6TH EDN, French Wendell L, Bell Jr Cecil H, Pearson Education; Sixth edition
3. Organization Development Interventions: Executing Effective Organizational Change, Behnam Bakhshandeh (Editor), Sohel Imroz (Editor), William Rothwell (Editor), CRC Press; 1st edition
4. Organization Development & Change, 9th Edition, Thomas G. Cummings and Christopher G. Worley, Cengage Learning

Semester - III

CC07: Industrial Safety Management

Course Outcomes

CO1	The students will be able **to identify** the qualification, duties and responsibilities and appointment of safety officer
CO2	The students will be able **to analyse** the causes and control of industrial disasters
CO3	The students will be able **to understand** the legal provision of various industrial safety
CO4	The students will be able **to identify** the types and causes of fire in industries

Unit I: Safety Management - Concept of Safety, Applicable areas, unsafe actions & Conditions. Responsibility of Safety - Society, Govt., Management, Union & employees. Safety Officer - Appointment, Qualification, Duties of safety officer. Safety Committee - Membership, Functions & Scope of Safety committee. Motivation & Training of employees for safety in Industrial operations.

Unit II: Disaster Management - Designing, Importance & implementation of Disaster Control Action Plan. Industrial Accidents - Causes & effects of Industrial accidents. Accident Radio Theory, Cost of Accidents, Impact of Accidents on employees, Union, Management & Society & their role & responsibility in the prevention of accidents.

Unit III: Legal Provisions regarding safety, Accident prevention & Compensation to affected employees as under Factories Act-1948, Factories Act (Amendment)1987, Maharashtra Factories Rule-1963,The Mines Act- 1952,Maharashtra Safety Officers Rule-1982,The Workmen Compensation Act- 1923,ESI Act, Public Liabilities Insurance Act-1991,Fatal Accident Act, Functions of National Safety Council. Accidents:- recording, Investigation analysis & reporting.

Unit IV: Fire- basic Chemistry/ Mechanism, Reasons, prevention & types of fire, extinction of fire, Loss prevention Association-Objective, formation, scope & significance.

Reference Books:

1. Industrial safety act, Bare act
2. Industrial Safety, Health and Environment Management Systems, Prof. Sunil S.Rao & R.K.Jain (Author), Khanna Publishers; Latest edition
3. Industrial Safety Management System, Raj Kishore Ojha (Author), 24by7Publishing; First Edition

4. Principles of Industrial Safety Management, DAS AKHIL KUMAR (Author), PHI Learning Pvt Ltd
5. Industrial Safety Management: Safety Health And Environment Management, Pravin M. Pathak , Jayant P. Khairnar, Notion Press

CC08: Labour Law - III

Course Outcomes

CO1	The students will be able to understand the regulations and provision included in Employee's Provident Fund Act. 1952
CO2	The students will be able to understand the regulations and provision included in Employee's State Insurance Act, 1948
CO3	The students will be able to understand the regulations and provision included in Worksman's Compensation Act. 1923
CO4	The students will be able to understand the regulations and provision included in Maternity Benefit Act. 1961

Unit I: Employees' Provident Fund Act, 1952 - Entire Act

Unit II: Employees State Insurance Act, 1948 - Entire Act

Unit III: Workman's Compensation Act, 1923 - Entire Act

Unit IV: Maternity Benefit Act, 1961 - Entire Act

Reference Books:

1. P.L MALIK'S HANDBOOK OF LABOUR AND INDUSTRIAL LAW GENERIC BOOK
2. Industrial Law – J. K. Bareja, Galgotia Publications Pvt Ltd
3. Industrial Relations and Labour Laws for Managers SAGE Publications India Private Limited; First Edition
4. Labour laws for Managers – B.D. Singh
5. Industrial & Labour Laws – S. P. Jain, Dhanpat Rai & Co.; Standard Edition

CC09: Employee Relations and Engagement

Course Outcomes

CO1	The students will be able **to learn** to build the effective employee relationship
CO2	The students will be able **to explain** effective employee communication
CO3	The students will be able **to relate** the work life balance and employee stress with employee well being
CO4	The students will be able **relate** engagement programmes with performance effectiveness

Unit I: Introduction to Employee Relations: Introduction, Overview of Employee Relations, Importance of Employee Relations, Employee Relations Management Tool, Core Issues of Employee Relations Management, Strategic Employee Relations Management: Introduction, Different Strategy Levels in an Organization, Strategy and Employment Policies, Future Challenges, the Psychological Contract

Unit II: The Employment Relationship; The Situation and the Challenge: Accelerating a caring and agile, Managing Engagements, Importance Employee Communication: Employee Communication, Employee communication Strategy and Examples, Employee Voice, Employee Voice Platforms and using it for strategy

Unit III: Employee Wellbeing: Employee Wellbeing, Work and non-work life conflict and employee well-being, Physical wellbeing incentives, Work Stress**:** Work stress models and theoretical frameworks, Common work stressors and strains, Individual differences in experiencing work stress, Recovery from work stress

Unit IV: The Workplace: Emotional Workplace, Physical Workplace, Technological Workplace, Purposeful Workplace, Job Titles from Future, Future of Work and Workplaces, **Engagement and Performance:** Why engagement is a part of performance, not all engagements are equal, Framework for Work engagement, Meaningful engagement

Reference Books:

1. Employee Relations Management 1st Edition P. N. Singh (Author), Neeraj Kumar (Author), Pearson
2. Employee Relations: A Practical Introduction (HR Fundamentals), Kogan Page; 2nd edition
3. Employee Relations Management, Sahoo D P; SAGE Publications India Pvt Ltd
4. Employee Relations: The International Journal; emerald publishing

5. Engaging Employees through Strategic Communication: Skills, Strategies, and Tactics; Jon Stemmle (Author), Mark Dollins (Author), Routledge; 1st edition
6. Managing Health, Safety and Well-Being: Ethics, Responsibility and Sustainability (Aligning Perspectives on Health, Safety and Well-Being) 1st ed.; Aditya Jain (Author), Stavroula Leka (Author), Gerard I.J.M. Zwetsloot (Author); Springer; 1st ed. 2018 edition
7. Employee Engagement: A Practical Introduction (HR Fundamentals Book 24), Emma Bridger (Author), Kogan Page; 3rd edition
8. Human Resource Management, 16/e, Dessler (Author), Varkkey Gary (Author), Biju (Author), Pearson

DSE03: Strategic Human Resource Management

Course Outcomes

CO1	The students will be able **to understand and differentiate** business and corporate strategies for human resource
CO2	The students will be able **to explain** work life balance of human resource. The students will be able **to evaluate** effectiveness of various modern recruitment and selection methods and will also be able **to map** competencies of human resource.
CO3	The students will be able **to explain** rewards and compensation strategies based on performances of employees.
CO4	The students will be able **to relate** leadership, power and politics in implementing strategic HR decisions

Unit I: Introduction to Strategic HRM, Definition, need and importance - Introduction to business and corporate strategies - Integrating HR strategies with business strategies – Developing HR plans and policies - Human Resource Environment, Technology and structure - Workforce diversity - Demographic changes – Temporary contract labour - Global environment - Global competition – Global sourcing of labour - WTO and labour standards

Unit II: Recruitment and retention strategies, Online recruitment - Employee referrals - Recruitment process outsourcing – Head hunting - Executive education – Flexi timing – Telecommuting - Quality of work life -Work – life balance – Employee empowerment - Employee involvement -Autonomous work teams, Training and Development Strategies Creating learning organization - Competency mapping – Multi-skilling –Succession planning - Cross cultural training

Unit III: Performance Management strategies, Defining key result areas (KRA) – Result based performance - Linking performance to pay - Merit based promotions, Reward and Compensation Strategies, Performance based pay - Skill based pay - Team based pay - Broad banding - Profit sharing - Executive compensation - Variable pay, Retrenchment strategies Downsizing - Voluntary retirement schemes (VRS) - HR Outsourcing – Early retirement plans - Project based employment

Unit IV: Human Aspects of Strategy implementation Behavioral issues in strategic implementation - Matching culture with strategy - Human side of mergers and acquisitions - Leadership, power and politics - Employee morale – Personal values and business ethics Global HR Strategies, Introduction to global HR strategies - Developing HR as a value added function.

Reference Books:

1. Strategic Human Resource Management , 5th Editiion, Jeffrey A. Mello, Cengage Learning
2. Strategic Human Resource Management : A General Managerial Approach, 2nd Edition, Charles R Greer, Pearson Education India
3. Armstrong's Handbook of Strategic Human Resource Management, Kogan Page; 6th edition
4. Strategic Human Resource Management, Tanuja Agrawal, Oxford
5. Strategic Human Resource Management and Development, 1st Edition, Ekta Sharma, Pearson Education

DSE03: Current trends in H.R. Practices

Course Outcomes

CO1	The students will be able **to learn and apply** the current trends of interview techniques for online and lateral recruitment.
CO2	The students will be able **to explain** the concept of job-varsatality and development of professional approach
CO3	The students will be able **to prepare** policies for retention of intellectual human factor
CO4	The students will be able **to understand** the role of BPOs and KPOs in development of HR culture and will also be able **to evaluate** HR policies by designing balance score card
CO5	The students will be able **to apply** current trend of HR on global and national perspective for making innovative and effective HR policies of an organisation.

Unit I: Recruitment – lateral and online, Interview technique – Payment of wages and salary in consolidated from – demerits

Unit II: Importance of Job description and allotment of duties attached to each job - Versatility – need of the hour- present industrial scenario. - Development of professional approach. -

Unit III: Retention of intellectual human factor. - Frequent transfer at frequent intervals. - Training and development – absence of innovative practices. -

Unit IV: VRS policies - Role of call centers, BPOs, KPOs and study of their industrial culture. Balanced score card, Rights of Intellectual properties

Reference Books:

1. Essentials of Human Resource Management and Industrial Relations, 6th Edition, P. Subba Rao, Himalaya Publishing House Pvt Ltd.
2. Current Trends In Human Resource Management, Preeti Surkutwar, LAP LAMBERT Academic Publishing; 1st edition
3. Recent Trends in Human Resource Management, Dr Ravindra Kanthe, Himalaya Publishing House Pvt Ltd
4. Emerging Trends in HRM: Sectoral Experiences, Mrudula E (Author), V V Ramani (Author), DGM- ICFAI Books
5. Human Resource Management: Text & Cases, 2nd Edition, Sharon Pande (Author), Swapnalekha Basak (Author), Vikas Publishing House

CC10: Legal Aspects in Environment Safety

Course Outcomes

CO1	The students will be able **to understand** the legal provisions for environment protection.
CO2	The students will be able **to describe** powers and functions of central and state pollution control boards for controlling air pollution
CO3	The students will be able **to describe** powers and functions of central and state pollution control boards for controlling water pollution
CO4	The student will be able **to differentiate** between sound and noise and will also be identify and control the causes of noise pollution

CO5	The students will be able **to relate** laws and regulations for industries in protection of environment.

Unit 1: Environment Protection Act, 1986 - Definitions, Occupier, Environmental pollution, handling of hazardous substance, offences by companies, penalties for contravention of the Act.

Unit 2: Air Pollution Act,1982 - Definition, Occupier, Air Pollution, Chimney, Approval Fuel, Emission, Powers & functions of Central & State Boards, role of approved laboratories, offences by companies, penalties & procedures.

Unit 3: Water Pollution Act, 1974 - Definitions, sewage effluent, trade effluent, outlet, stream. Powers & functions of Central State Boards, role of approved laboratories, Offences by Companies, Penalties & Procedures.

Unit 4: Noise Pollution - Definition of sound & noise, sources of noise, measurement of noise, effect of noise, Physiological, Psychological & behavioural, noise control.

Reference Books:

1. Indian Factories Act 1948, Universal Lexis Nexis.
2. Pollution Management in Industies-R.K.Trivedi
3. Environmental Industrial Pollution Control, P. R. Trivedi, Akashdeep Publishing House
4. Environmental Law Seventh Edition by Dr S C Shastri, Eastern Book Company
5. Environmental Law Sengar (Author), Dharmendra S (Author) Prentice Hall India Learning Private Limited
6. INDIAN ENVIRONMENTAL LAW, Shibani Ghosh (Author), The Orient Blackswan; First Edition

Semester – IV

CC11: Labour Law - IV

Course Outcomes

CO1	The students will be able **to understand** the regulations and provision included in Trade Union Act, 1936
CO2	The students will be able **to understand** the regulations and provision included in Payment of Bonus Act, 1965
CO3	The students will be able **to understand** the regulations and provision included in Payment of Gratuity Act, 1972
CO4	The students will be able to understand the regulations and provision included in Minimum Wages Act, 1948

Unit I: Trade Union Act, 1936 - Entire Act

Unit II: Payment of Bonus Act, 1965 - Entire Act

Unit III: Payment of Gratuity Act, 1972 - Entire Act

Unit IV: The Minimum Wages Act, 1948 - Entire Act

Reference Books:

1. P.L MALIK'S HANDBOOK OF LABOUR AND INDUSTRIAL LAW GENERIC BOOK
2. Industrial Law – J. K. Bareja, Galgotia Publications Pvt Ltd
3. Industrial Relations and Labour Laws for Managers SAGE Publications India Private Limited; First Edition
4. Labour laws for Managers – B.D. Singh
5. Industrial & Labour Laws – S. P. Jain, Dhanpat Rai & Co.; Standard Edition

CC12: Ethics in HRM

Course Outcomes

CO1	The students will be able **to learn and explain** various theories of ethics.
CO2	The students will be able **to differentiate** business and organisational ethics.
CO3	The students will be able **to relate** institutional framework for corporate governance is application
CO4	The students will be able **to learn and apply** ethical practices in human resource management.

Unit I: Ethics - An introduction, Concept of ethics, Values & Ethics – Meaning & Types of Values, Ethical Action–Morals, Morality, Moral development pyramid, Beliefs, Religiousness and Law. Ethical Decision Making - Normative Framework –Principle of personal benefit, Principle of Social Benefit, Principle of Neutralization, Categorical Imperative, Principle of Duty, Principle of Justice and Principle of Lawfulness. Approaches / Theories of ethics – Gandhian Approach, Friedman's Economic theory, Kant's Deontological theory, Mill & Bentham's Utilitarianism theory, Aristotle's Virtue based ethics and Narrative based ethics – Case studies on inspirational life stories of individuals.

Unit II: Business Ethics - Ethics in Business – Myth & Reality, The Indian Business scene, Ethical Concerns, LPG & Global trends in business ethics, Business ethics rating in India. Organizational Ethics – Organizations & Organisation culture, Types of Organization, Corporate code of ethics – Formulating, Advantages, implementation Professionalism and professional ethics code

Unit III: Business & Society - Business & its stakeholders, Social Responsibility – Concept of CSR, Public Policy approach & role of NGO, Environmental Ethics – concerns, issues & case studies. Corporate Governance - Objectives , issues, features, Corporate Governance codes – Cadbury report, CII recommendations ,Corporate Governance for public sector, Corporate Governance & Investment – ethical investing, Insider trading, Case studies – Tata Finance, Enron case & UTI case.

Unit IV: Ethical Issues in HRM - The Ethical Organisation in the Boundary less World Ethics in Recruitment and Selection, the Employment Interview, Nepotism. Occupational Testing and Psychometric Instruments: an Ethical Perspective; Ethics and Equality – Gender Bias, Sexual Harassment, Discrimination, Affirmative Action HRM and Employee Well-Being - Civil Liberties, Flexible Working Patterns, Presenteeism and the Impact of Long Working Hours on Managers, Dichotomy,

Professional Loyalty The New Pay: Risk and Representation at Work; Conditions of Worth and the Performance Management Paradox; Employee Participation and Involvement.

Reference Books:

1. Business Ethics – Concept & Practice - B. H. Agalgatti & R. P. Banerjee – (Nirali Publication)
2. Ethics in Business & Management - R. P. Banerjee (Himalaya Publication)
3. Business Ethics. by Crane – Pub. By Oxford Press
4. Corporate Governance & Business Ethics – (Text & Cases), U. C. Mathur, Macmillan India Ltd.
5. Business Ethics, C S V Murthy, Himalaya Publishing House
6. Ethics in Human Resource Management, Dr. Sinju Sankar, Discovery Publishing House Pvt Ltd

DSE04: Human Resource Information System

Course Outcomes

CO1	The students will be able **to learn and explain** steps in implementing HRIS.
CO2	The students will be able **to identify** need for HRIS investment and implementation of HRIS.
CO3	The students will be able **to relate** application of HRIS in various domains of HR.
CO4	The students will be able **to understand** the current and future trends of HRIS.

Unit I: Introduction to Human Resource Information System (HRIS), The Concept of HRIS, The role of IT, Database concepts and applications in HRIS, Steps in implementing an HRIS, Benefits and limitations of HRIS

Unit II: Determining HRIS needs: HRIS needs analysis, System design and acquisition, HR metrics and workforce analytics, Costs justifying HRIS investment. Resource Information System implementation and acceptance: HRIS Project management, Change management, implementation, integration, maintenance of HRIS

Unit III: HRIS Applications: HR administration and HRIS, Talent management, Job analysis and Human Resource Planning, Recruitment and Selection in the Internet context, Training issues in HRIS, Performance management, Compensation and HRIS.

Unit IV: Key issues in HRIS: Information Security and privacy in HRIS, The future of HRIS, The Concept of HR Analytics and Digital HR

Reference Books:

1. Dr. Michael Kavanagh, Dr. Mohan Thite: Human Resource Information Systems- Basics, application, future and directions, SAGE Publications, Inc; Third edition
2. P.K.Gupta and Sushil Chaabra: Human Resource Information Systems, Himalaya Publishing House; First Edition
3. Badgi, Practical Guide to Human Resource Information Systems, Prentice Hall India Learning Private Limited; 1st edition
4. Raman Preet, Future of Human Resource Management: Case Studies with Strategic Approach, Wiley

DSE04: HR Accounting and Audit

Course Outcomes

CO1	The students will be able **to explain** Accounting and Reporting of Human Resource.
CO2	The students will be able **to differentiate** various methods of HR accounting.
CO3	The students will be able **to differentiate** various approaches of HR audit.
CO4	The students will be able **to learn and apply** HR Audit and Legal Compliances

Unit I: Human Resource Accounting: An Overview, Meaning, Need and Objectives of HR Accounting, Advantages and Limitations of Human Resource Accounting, Reporting of Human Resource Accounting at National Levels.

Unit II: Methods and Human Resource Accounting Practices in India: Methods of Human Resource Accounting: Cost of Production Approach, Historical Cost Model, Replacement Cost Model, Opportunity Cost. Capitalized Earnings Approach: Economic Value Model, Capitalization of Salary.

Unit III: Human Resource Audit: An Overview, Human Resource Audit - Meaning, Features, Objectives of HR Audit Benefits and limitations of HR Audit, Need and Significance of HR Audit, Process of HR Audit, Approaches of HR Audit, Principles of Effective HR Auditing, Role of HR Auditor, Methods of conducting HR Audit – Interview, Workshop, Observation, Questionnaire., Components of HR Audit

Unit IV: HR Audit for Legal Compliance and Safe Business Practices: Areas covered by HR Audit - Pre-employment Requirements, Hiring Process, New-hire, Orientation Process, Workplace Policies and Practices, HR Audit as Intervention - Introduction, Effectiveness of Human Resource Development.

Reference Books:

1. Rakesh Chandra Katiyar, Accounting For Human Resources , UK Publishing
2. M. Saeed, D.K. Kulsheshtha , Human Resource Accounting, Anmol Publications.
3. D. Prabakara Rao, Human Resource Accounting, Inter India Publications
4. Human Resource Management by Gary Dessler, Pearson Publications

For all courses the question paper pattern shall as follows-

N.B. 1) All questions are compulsory

2) All questions carry equal marks (16 marks each)

Q.1 (From Unit 1)

A **OR** B

Q.2 (From Unit 2)

A **OR** B

Q.3 (From Unit 3)

A **OR** B

Q.4 (From Unit 4)

A **OR** B

Q.5 Write Short Notes on – (4 x 4 =16)

A (From unit I)
B (From unit II)
C (From unit III)
D (From unit IV)

M.COM (Computer Management)
W.E.F.2023-24

Program Specific Outcomes

PSO 1	The student will be able to transform complex business scenarios and contemporary issues into problems, investigate, understand and propose integrated solutions using emerging technologies.
PSO 2	Design and development of solutions by applying computer skills, knowledge of quantitative techniques in computer and management applications in practice.
PSO 3	The student will be able to develop a product or process by applying knowledge of programming, web, database, human computer interaction, and networking & security tools.
PSO 4	The student will be able to contribute to research in their chosen field, function, and communicate effectively, to perform both individually and in a multi-disciplinary team.
PSO 5	The student will be able to make decisions related to work that demonstrate intellectual curiosity, a commitment to lifelong learning in students and understanding of being an ethical computing professional with societal and environmental concerns.

Teaching and Examination Scheme

A teaching and examination scheme for students admitted to the M. Com. (Computer Management) Program shall be as follows:

Master of Commerce (Computer Management)
Semester I

Sr. No.	Course Type	Subjects	Course Code	Teaching Scheme			Examination Scheme					Credits
				Total Hours Per Week			Max. Marks SEE (TH) *	Max Marks SEE (PR)	Max. Marks (CIE)	Total Marks	Min. Passing Marks	
				Theory	Practical	Total						
1.	Core	Python Programming		4	-	4	80	-	20	100	40	4
2.	Core	Practical Python Programming		-	8	8	-	100	-	100	50	4
3.	Core	Cloud Computing		4	-	4	80	-	20	100	40	4
4.	Elective	Practical Advance Java OR Practical React JS OR MOOC		-	8	8	-	100	-	100	50	4
5.	Core	Research Methodology		4	-	4	80	-	20	100	40	4

				12	16	28	240	200	60	500	**250**	20

***** Semester End Examination which is mandatorily required to be appeared by every student

Note:

7. TH = Theory, CIE= Continuous Internal Evaluation
8. SEE for Theory as well as Practical examinations as mentioned above shall be conducted by the University for all semesters and the CIE shall be conducted by colleges on behalf of the University for all Semesters.

Master of Commerce (Computer Management)
Semester II

Sr. No.	Course Type	Subjects	Course Code	Teaching Scheme			Examination Scheme					Credits
				Total Hours Per Week			Max. Marks SEE (TH) *	Max Marks SEE (PR)	Max. Marks (CIE)	Total Marks	Min. Passing Marks	
				Theory	Practical	Total						
1.	Core	ASP.Net		4	-	4	80	-	20	100	40	4
2.	Core	Practical ASP.Net		-	8	8	-	100		100	50	4
3.	Core	Information Security & Cyber Law		4	-	4	80	-	20	100	40	4
4.	Elective	Practical Android Programming OR Practical Angular JS OR MOOC		-	8	8	-	100		100	50	4
5.	Core	On Job Training		-	8	8	-	100	-	100	50	4
				8	24	32	160	300	40	500	**250**	20

***** Semester End Examination which is mandatorily required to be appeared by every student

Note:

1. TH = Theory, CIE= Continuous Internal Evaluation
2. SEE for Theory as well as Practical examinations as mentioned above shall be conducted by the University for all semesters and the CIE shall be conducted by colleges on behalf of the University for all Semesters.

Master of Commerce (Computer Management)
Semester III

		Subjects		Teaching Scheme	Examination Scheme	Credits

Sr. No.	Course Type		Course Code	Total Hours Per Week			Max. Marks SEE (TH) *	Max Marks SEE (PR)	Max. Marks (CIE)	Total Marks	Min. Passing Marks	
				Theory	Practical	Total						
1.	Core	Advance Database Management System		4	-	4	80	-	20	100	40	4
2.	Core	Practical – SQL & PL/SQL		-	8	8	-	100		100	50	4
3.	Core	Management Information System		4	-	4	80	-	20	100	40	4
4.	Elective	Data Communication & Computer Network OR Intelligent System (AI) OR MOOC		4	-	4	80	-	20	100	40	4
5.	Core	Research Project		-	8	8	-	100	-	100	50	4
				12	16	28	240	200	60	500	**250**	20

***** Semester End Examination which is mandatorily required to be appeared by every student

Note:

1. TH = Theory, CIE= Continuous Internal Evaluation
2. SEE for Theory as well as Practical examinations as mentioned above shall be conducted by the University for all semesters and the CIE shall be conducted by colleges on behalf of the University for all Semesters.

Master of Commerce (Computer Management)
Semester IV

Sr. No.	Course Type	Subjects	Course Code	Teaching Scheme			Examination Scheme					Credits
				Total Hours Per Week			Max. Marks SEE (TH) *	Max Marks SEE (PR)	Max. Marks (CIE)	Total Marks	Min. Passing Marks	
				Theory	Practical	Total						
1.	Core	Software Engineering		4	-	4	80	-	20	100	40	4
2.	Core	Mobile Computing		4	-	4	80	-	20	100	40	4
3.	Core	Big Data & Hadoop		4	-	4	80	-	20	100	40	4

4.	Elective	Practical Ruby on Rail OR Practical Web with Word Press OR MOOC		-	8	8	-	100	-	100	50	4
5.	Core	Research Project		-	12	12	-	100	-	100	50	6
				12	20	32	240	200	60	500	**250**	22

***** Semester End Examination which is mandatorily required to be appeared by every student

Note:

1. TH = Theory, CIE= Continuous Internal Evaluation
2. SEE for Theory as well as Practical examinations as mentioned above shall be conducted by the University for all semesters and the CIE shall be conducted by colleges on behalf of the University for all Semesters.

QUESTION PAPER PATTERN
First / Second / Third / Fourth Semester
Master of Commerce (Computer Management) - M.Com.(CM)
OB & CBCS Examination

Time: 3 Hours **Total Marks: 80**

N. B. - a) Draw well labeled diagram wherever necessary.

b) All questions are compulsory.

Q1. **8 x 2 = 16**

N. B. – 1. Each question carries two marks.

2. Answers should not more than five lines.

A. Unit I

B. Unit I

C. Unit II

D. Unit II

E. Unit III

F. Unit III

G. Unit IV

H. Unit IV

Q2. **8 x 3 = 24**

N. B. – 1. Each question carries three marks.

2. Answers should not more than ten lines.

A. Unit I

B. Unit I

C. Unit II

D. Unit II

E. Unit III

F. Unit III

G. Unit IV

H. Unit IV

N. B. – 1. Each question carries five or ten marks.

2. Answers should not more than 250 words for 5 marks questions and 600 words for 10 Marks questions respectively.

Q3. **Either**

(A) 5 Unit I

(B) 5 Unit I

OR

(C) 10 Unit I

Q4. **Either**

(A) 5 Unit II

(B) 5 Unit II

OR

(C) 10 Unit II

Q5. **Either**

(A) 5 Unit III

(B) 5 Unit III

OR

(C) 10 Unit III

Q6. **Either**

(A) 5 Unit IV

(B) 5 Unit IV

OR

(C) 10 Unit IV

Master of Commerce (Computer Management) – M.Com(CM)

Semester – I

Paper – 1

Course Code – **Course Name – Python**

	Learning Outcome
LO1	Given information on different types of programming languages so that Students will be able to **distinguish** the high-level language and **understand** the benefits of using python for development of application program.
LO2	Given information on control statements of program student will be able to understand the program flow and will able to **implement** various control statement and functions for effective code design.
LO3	Given information on advance program structure Students will able to **interpret** multiple data structured elements while developing real life application for business solution.
LO4	Given information on basics of object oriented programming student will be able **create and use** different types of objects, classes and File handling operations for redesigning the program structure.

UNIT - I

The Way of the Program - The Python Programming Language, What Is a Program?, What Is Debugging?, Syntax Errors, Runtime Errors, Semantic Errors, Experimental Debugging, Formal and Natural Languages, The First Program. **Variables, Expressions, and Statements** - Values and Types, Variables, Variable Names and Keywords, Operators and Operands, Expressions and Statements, Interactive Mode and Script Mode, Order of Operations, String Operations, Comments. **Functions** - Function Calls, Type Conversion Functions, Math Functions, Composition, Adding New Functions, Definitions and Uses, Flow of Execution, Parameters and Arguments, Variables and Parameters Are Local, Stack Diagrams, Fruitful Functions and Void Functions, Why Functions?, Importing withfrom.

UNIT - II

Conditionals and Recursion - Modulus Operator, Boolean Expressions, Logical Operators, Conditional Execution, Alternative Execution, Chained Conditionals, Nested Conditionals, Recursion, Stack Diagrams for Recursive Functions, Infinite Recursion, Keyboard Input. **Fruitful Functions** - Return Values, Incremental Development, Composition, Boolean Functions, More Recursion, Leap of Faith, One More Example, Checking Types. **Iteration** - Multiple Assignment, Updating Variables, The while Statement, break, Square Roots, Algorithms, Debugging. **Strings** - A String Is a Sequence, len, Traversal with a for Loop, String Slices, Strings Are Immutable, Searching, Looping and Counting, String Methods, The in Operator, String Comparison.

UNIT - III

Lists - A List Is a Sequence, Lists Are Mutable, Traversing a List, List Operations, List Slices, List Methods, Map, Filter, and Reduce, Deleting Elements, Lists and Strings, Objects and Values, Aliasing, List Arguments. **Dictionaries** - Dictionary as a Set of Counters, Looping and Dictionaries, Reverse Lookup, Dictionaries and Lists, Memos, Global Variables, Long Integers. **Tuples** - Tuples Are Immutable, Tuple Assignment, Tuples as Return Values, Variable-Length Argument Tuples, Lists and Tuples, Dictionaries and Tuples, Comparing Tuples, Sequences of Sequences.

UNIT - IV

Files – Persistence, Reading and Writing, Format Operator, Filenames and Paths, Catching Exceptions, Databases, Pickling, Pipes, Writing Modules. **Classes and Objects** - User-Defined Types, Attributes, Rectangles, Instances as Return Values, Objects Are Mutable, Copying. **Classes and Functions** – Time, Pure Functions, Modifiers, Prototyping Versus Planning. **Classes and Methods** - Object-Oriented Features, Printing Objects, Another Example, A More Complicated Example, Theinit Method, The str Method Operator Overloading, Type-Based Dispatch, Polymorphism, Debugging, Interface and Implementation. **Inheritance** - Card Objects, Class Attributes, Comparing Cards, Decks, Printing the Deck, Add, Remove, Shuffle, and Sort, Inheritance, Class Diagrams, Debugging, Data Encapsulation.

Text Book:

1. Allen B. Downey, Think Python, Shroff Publishers, O'Reilly.

Reference Books:

1. Charles Dierbach, Introduction to Computer Science using Python,Wiley.
2. Laura Cassell & Alan Gauld, Python Projects, Wrox A WileyBrand.
3. Paul Greis, Jennifer Campbell, Jason Montojo, Practical Programming – An Introduction to Computer Science using Python, ShroffPublishers.

Practical List of Python

1. Write a Python program to convert the given temperature from Fahrenheit to Celsius and vice versa depending upon users choice.
2. Write a Python program that allows the user to enter any integer base and integer exponent, and displays the value of the base raised to that exponent.
3. Write a Python program to calculate total marks, percentage and grade of a student. Marks obtained in each of the three subjects are to be input by the user. Assign grades according to the following criteria:
   Grade A: Percentage >=80

   Grade B: Percentage>=70 and <80

   Grade C: Percentage>=60 and <70

   Grade D: Percentage>=40 and <60

   Grade E: Percentage<40
4. Write a Python program to find the area of rectangle, square, circle and triangle by accepting suitable input parameters from user using user-defined function.
5. Write a Python program to swap two variables
6. Write a Python program to input any 10 numbers and calculate their average using user defined function?
7. Write a Python Program to Check if a Number is Positive, Negative or 0
8. Write a Python Program to Check if a Number is Odd or Even
9. Write a Python program to find the largest number among the three input numbers

10. Write a Python Program to Display the multiplication Table
11. Write a Python program to print current date and time. In addition to this, print each component of date(i.e.year,month,day) and time (i.e.hours, minutes and microseconds) separately.
12. Write a Python program to calculate the subtraction of two compatible matrices ?

13. Write a Python program to print first 10 prime numbers.
14. Write a Python Program to Check Whether a String is Palindrome or Not
15. Write a Python Program to Convert Decimal to Binary, Octal and Hexadecimal
16. Write a Python Program to Sort Words in Alphabetic Order.
17. Write a Python Program to Find Sum of Natural Numbers Using Recursion
18. Write a Python Program to Print the Fibonacci sequence
19. Write a Python Program to Convert Kilometers to Miles
20. Write a Python Program to Find the Square Root

Paper – II

Course Code - **Course Name: Cloud Computing**

Learning Outcome	
LO1	Given information on basics of Cloud Computing, students will be able to **understand** the different paradigms, also able to **define** fundamental terminologies of Cloud Computing.
LO2	Given information on architecture and deployment model, students will be able to **remember** structure and the use of Cloud management with its types.
LO3	Given information on various cloud service models students will be able to **differentiate** and illustrate its Virtualization.
LO4	Given information on service providers, students will be able to **describe** the cloud service Model and understand the importance of its service providers.

UNIT-I

Computing Paradigms: High-Performance Computing, Parallel Computing, Distributed Computing, Cluster Computing, Grid Computing, Cloud Computing, Bio computing, Mobile Computing, Quantum Computing, Optical Computing, Nano computing, Network Computing.

Cloud Computing Fundamentals: Need for Cloud Computing, Defining Cloud Computing; Network Computing Cloud Computing as a Service, Cloud Computing as a Platform, Principles of Cloud computing, Essential Characteristics, Requirements for cloud services, Benefits and Drawbacks of cloud computing.

UNIT-II

Cloud Computing Architecture and Management: Cloud architecture, Anatomy of the Cloud, Network Connectivity in Cloud Computing, Cloud Applications, Managing the Cloud-Cloud Infrastructure and Cloud application, Migrating Application to Cloud, Phases of Cloud Migration, Approaches for Cloud Migration, **Cloud deployment model-** Characteristics, Types of Deployment -Private, Public, community and hybrid.

UNIT-III

Cloud Service Models: Infrastructure as a Service, **IaaS-** Characteristics, Suitability, Pros and Cons, Summary of IaaS Providers, Platform as a Service **PaaS-** Characteristics, Suitability, Pros and Cons, Summary of PaaS Providers, Platform as a Service, Software as a Service. **SaaS** - Characteristics, Suitability, Pros and Cons, Summary of SaaS Providers, Platform as a Service, Other Cloud Service Models**. Virtualization:** Opportunities, Approaches to virtualization.

UNIT-IV

Cloud Service Providers: EMC, EMC IT, Captiva Cloud Toolkit, Google, Cloud Platform, Cloud Storage, Google Cloud Connect, Google Cloud Print, Google App Engine, Amazon Web Services, Amazon Elastic Compute Cloud, Amazon Simple Storage Service, Amazon Simple Queue, service, Microsoft, Windows Azure, Microsoft Assessment and Planning Toolkit, SharePoint, IBM, Cloud Models, IBM Smart Cloud, SAP Labs, SAPHANA Cloud Platform, Virtualization Services Provided by SAP, Sales force, Sales Cloud. **Service Cloud:** Knowledge as a Service, Rack space, VMware, Manjra soft, Aneka Platform.

Text Book:

1. Essentials of cloud Computing: K. Chandrasekhran, CRCpress,2014

Reference Book:

1. Cloud Computing: Principles and Paradigms by Rajkumar Buyya,James Broberg and Andrzej M. Goscinski, Wiley, 2011.
2. Cloud Computing: A Practical Approach, Anthony T.Velte, Toby J.Velte, Robert Elsenpeter, Tata McGraw Hill, 2011.
3. Cloud Computing: Implementation, Management and Security, John W. Rittinghouse, James F.Ransome, CRC Press, 2012.

Paper – III

Course Code **Course Name – Advance Java**

	Learning Outcome
LO1	Given information on the use of connectivity (JDBC) and networking which helps for client server application, students will be able to **create** management applications practices emphasized for network based client server application.
LO2	Given information is used for creation of enterprise edition work with servlet's and session tracking mechanism; students will be able to **develop** the solution for human computer interaction.
LO3	Given information on event handling and Java Server Pages, students will able to **design** and **create** the web by using action tags with the help of JSP API
LO4	Given information on Extensions and Standard Tags library students will be able to Apply advance Tags in their web pages and able to **design** and **develop** the application by using technologies.

UNIT - I

Introducing Swing – JFC, The MVC Architecture, Applet, Window Panes, Important Classes of the javax.swing Package, Setting the Look and Feel of Components, An Applet with Swing Components. **Working with JDBC** - Introducing JDBC, Exploring JDBC Drivers, Exploring the Features of JDBC, Describing JDBC APIs, Exploring Major Classes and Interfaces, Exploring JDBC Processes with the java.sql Package, Working with Transactions. **Network Programming -** Networking Basics, Network Programming in Java Using the java.net Package, Establishing the two-way Communication between Server and Client, Retrieving a file at server, Learning the DatagramSocket and DatagramPacket Classes, Understanding the Content and Protocol Handlers.

UNIT - II

RMI, Naming Service, Serialization, and Internationalization - RMI Architecture, RMI Registry, Dynamic Code Loading in RMI, RMI API, Creating a Distributed Application, using RMI, Naming Services, Directory and Naming Services, Overview of JNDI, Object Serialization, Internationalization, Java and Internationalization, Internationalizing Web Applications. **Introducing the Java EE Platform** - Enterprise Application Concepts, Introducing the Java EE 6 Platform, HTTP Protocol, Exploring Web Application, Introducing Web and Application Servers. **Working with Servlets** - Exploring the Features of Java Servlet, Exploring New Features in Servlet 3.0, Exploring the Servlet API, Explaining the Servlet Life Cycle, Understanding Servlet Configuration, Creating a Sample Servlet, Creating a Servlet by using Annotation, Working with ServletConfig and ServletContext Objects, Working with the HttpServletRequest and HttpServletResponse Interfaces, Exploring Request Delegation and Request Scope, Describing a Session, Introducing Session Tracking, Exploring the Session Tracking Mechanisms, Using the Java Servlet API for Session Tracking.

UNIT - III

Introducing Event Handling and Filters - Introducing Events, Intoducing Event Handling, Working with the Types of Servlet Events, Introducing Filters, Exploring Filter API, Configuring a Filter, Creating a Web Application Using Filters, Using Initializing Parameter in Filters, Manipulating Responses, Discussing Issues in Using Threads with Filters. **Working with JavaServer Pages (JSP)** - Introducing JSP Technology, Exploring New Features of JSP 2.1, Listing Advantages of JSP over Java Servlet, Exploring the Architecture of a JSP Page, Describing the Life Cycle of a JSP Page, Working with JSP Basic Tags and Implicit Objects, Working with Action Tags in JSP, Exploring the JSP Unified EL, Using Functions with EL.

UNIT - IV

JSP Tag Extensions and Standard Tag Library - Exploring the Elements of Tag Extensions, Exploring the Tag Extension API, Working with Classic Tag Handlers, Working with Simple Tag Handlers, Working with JSP Fragments, Working with Tag Files, Introducing JSTL, Working with the Core Tag Library, Working with the XML Tag Library, Working with the

Internationalization Tag Library, Working with the SQL Tag Library, Working with the Functions Tag Library. **Introducing Hibernate** - Introducing Hibernate, Exploring the Architecture of Hibernate, Downloading Hibernate, Exploring HQL, Understanding Hibernate O/R Mapping, Working with Hibernate, Implementing O/R Mapping withHibernate.

Text Book:

1. Prof. M. T. Savaliya, Advance java Technology, DreamtechPress.

Reference Books:

1. Dr. Ashwin Mehta, Sarika Shah, Advance Java for Students, ShroffPublishers.
2. Patrick Naughton & Herbert Schildt, The Complete Reference: Java 2, McGraw- Hill.
3. Joseph Weber, Using Java 2 Platform, Prentice Hall ofIndia.
4. Uttam K. Roy, Advance Java Programming, OxfordUniversity.
5. Kanika Lakhani, Advance Java Programming, KatsonBooks.

Practical List of Advance Java

1. Write a Java program to develop an applet that draws a circle. The dimension of the applet should be 500 x 300 pixels. The circle should be centered in the applet and have a radius of 100 pixels. Display your name centered in a circle.(using drawOval() method).
2. WriteaJavaprogramtodrawtenredcirclesinaverticalcolumninthecenterofthe applet.
3. Write a Java program to develop calculator-using Swing and add image on Button.
4. Write a Java program to find the IP address or computer name of local machine.
5. Write a Java program with class Greeting Client is a client program that connects to a server by using a socket and sends a greeting, and then waits for a response.
6. Write a Java program that implements a simple client/server application. The client sends data to a server the server receives the data, uses it to produce a result and then sends the result back to the client. The client displays the result on the console. For ex the data send from the client is a numbers and the result produce by the server is the addition of that number.

7. Write a Java program to create an application that displays a frame with a menu bar. When a user selects any menu or menu item, display that selection on a text area in the center of the frame.
8. Write RMI application where client supplies data to withdraw and server response with new account balance. Provide your custom security policy for this application.
9. Write a Java program to develop database application that allows user to Insert, Update, Delete values in a Table and manages appropriate exception handling when wrong values are enter.
10. WriteaJavaprogramtopresentasetofchoiceforusertoselectaproductand display the price of product.
11. Write a Java program to show validation of user using servlet.
12. Write a Java program to develop a simple servlet question answer application
13. Write a Java program to pass any URL string and display all 4 elements of URL string.
14. Write a Java program to trap all the events of mouse listener interface.
15. Write a Java program to show validation of user using JSP.
16. Write a Java program to display message on browser using JSP.
17. Write a Java program to connect with the google.com and retrieve the html code of default webpage.
18. Write a Java program to present a set of choices for a user to select stationary products and display the price of product after selection from the list.
19. Write a Java program to demonstrate typical editable table, describing employee details for a software company.
20. Write a Java program to trap all the events of key listener interface.
21. Write a Java program of calling one servlet by another servlet.
22. Write a Java program to develop a simple servlet calculator application.
23. Write a Java program to set scope of beans.
24. Write a Java program to create a JSP application that accepts registration details from the student and stores the details into the database table.
25. Write a Java program to develop a JSP application that authenticate user login as per the registration details. If login success then forward user to the index page otherwise show login failure message.

26. Write a Java program using split pane to demonstrate a screen divided into two parts contains a name of planets and another display the image of planet. When user selects the planet name from the left screen appropriate image of display in right screen.
27. Write a Java program to develop a web application to add items in the inventory using JSP.
28. Write a Java program to create a web Form, which processes servlet and demonstrates use of cookies and sessions.
29. Write a Java program to develop a simple JSP program for user login form with static and dynamic database.
30. Write a Java program to develop a JSP program to display the grade of a student by accepting the marks of five subjects.

Paper – III

Course Code **Course Name – React JS**

	Learning Outcome
LO1	Given information on ECMS script student will be able to **understand** the basic concept of scripting language as well as able to **use** functions in the program
LO2	Given information on React JS basic concepts students will be able to remember the directory structure and nested elements of JSX
LO3	Given information on props & state, components and routing student will be able to **create** components and **apply** them in their program.
LO4	Given information and form & user input and hooks students will be able **design** Form, **create** and **apply** custom hooks in their application.

UNIT – I

Introduction of ECMS script: Introduction var, let & const, Arrow function, setTimeout & clearTimeout method, setInterval & clearInterval mthods, map function, filter function, join function, callback function, spread operator, reduce function, sort function, sort function, classes, properties and method, import and export

UNIT – II

Introduction of React JS: About ReactJs, server requirements, node Js & NPM, Webpack, Babel & JSX, Directory Structure; **Introduction of JSX**- Basic Concept, nested elements in JSX, JSX attributes, JSX Comments

UNIT – III

Props & States: Introduction, default props, props types, basic states, common Antipattern, SetState, State, Events & Managed controls; **Components**: Class components, functional components; **Routing**: Installation of React Routing, Create components, Add a route

UNIT – IV

Forms and User Input: controlled components, uncontrolled components; **Hooks**: UseState & State updating, multiple states, rules of Hooks, useEffect, custom Hook

Reference Books

1. Learning React: Modern Patterns for Developing React Apps 2nd Edition by Alex Banks & Eve Porcello
2. React Key Concepts: Consolidate your knowledge of React's core features by Maximilian Schwarzmuller
3. The Road to React: Your journey to master plain yet pragmatic React.js by Robin Wieruch
4. React and React Native: Build cross-platform JavaScript applications with native power for the web, desktop, and mobile, 4th Edition 4th ed. Edition by Adam Boduch, Roy Derks and Mikhail Sakhniuk
5. React.js Complete Guide To Server-Side Rendering (Front-end development) by Gerard van der Put
6. Learn React Hooks: Build and refactor modern React.js applications using Hooks by Daniel Bugl

Practical List React JS

1. Write a program to Build Search filter in React - React code to build a simple search filter functionality to display a filtered list based on the search query entered by the user.
2. Write a program to create Simple counter exercise - Creating a simple counter using React which increments or decrements count dynamically on-screen as the user clicks

on the button. This exercise requires knowledge of fundamental React concepts such as State, Component, etc.

3. Write a program to Display a list in React - React code to print each item from the list on the page using Array.map() function to display each item on the page.
4. Write a program to Build Accordion in React - Creating an accordion that toggles text content on click of the accordion header using React State and conditional rendering.
5. Write a program to create Image Slider using React JS - React exercise to create an image slide, where users can view multiple images with next/previous buttons. Additionally, there is also an option to select an image from any index of the list through a click-on option circle.
6. Write a program to Create a Checklist in React - React code to display a checklist with multiple options that can select and the selected options are dynamically displayed on the screen. React State is used to keep track of checked options and onChange() Event handler is triggered to alter the state whenever an option is checked or unchecked.
7. Write a program to create Simple Login form in React - React code for simple login form where the user login by entering their username and password. The form inputs are validated to check if correct information is entered and the error messages are the validation fails. The login form is hidden and the “Welcome, ${name}” message is shown when the user login is successful.
8. Write a program to Print data from REST API - React code to collect data from rest API using fetch() in JavaScript combined with useEffect() to load the content on page render.
9. Write a program to create a Multi-Page navigation using React Router - React code to develop a multipage application with navigation for Home, About and Blog pages. The route-based component rendering is implemented using the “react-dom” npm package to allow users to navigate to different pages and render the component with respect to the route.
10. Write a program to create Context API in React Components - Context allows values to be passed from multiple levels of child components without using props. Thus context can be used as an alternative to Redux in some of the cases.
11. Write a program to Create simple Calculator: Create Simple calculator in React
12. Write a program to Create Image Search: Create image search using ReactJs and Unsplash Developer API.

13. Write a program to create Youtube Search: Youtube Video Search in React
14. Write a program to Create Todo List: Create Todo List in React.
15. Write a program to Integrate Bootstrap framework with React and Create Simple Registeration Form
16. Write a program to Integrate Material UI framework with React and Create Simple Registeration Form
17. Create React Fully Responsive Website: Build a fully responsive website in ReactJS, viewable in desktop, mobile, tablet.
18. Create Static Website: Create a static website by creating reusable components like button, cards, container, icons
19. Create Weather App: Create Weather App by using free OpenWeather.
20. Create React Password Generator: Generate strong password using ReactJS.

Semester – II

Paper – 1

Course Code – **Course Name – ASP.Net**

	Learning Outcome
LO1	Given information on **development** and **deployment** cycles of enterprise applications so that Students will be able to understand the ASP.NET frame work to and enhance the web page with the combination of advance web designing tools(CSS3, HTML5)build distributed enterprise application
LO2	Given information to **understand** server controls like secure protocols and also **examine** the entered data on the web page which helps to handle Master page with cookies.

LO3	Given information to **access** the backend (database)with suitable connectivity controls and **deploy** a secure client server in real life application with customized web page like secure web access methods
LO4	Given information will **deploy** the web application by application interface control and WCF services so that Students will be able to **create** dynamic web applications using a combination of client-side (JavaScript, HTML, XML, WML) and server-side technologies (ASP.NET, ADO.NET).

UNIT – I

An introduction to ASP.NET programming: An introduction to web applications, An introduction to ASP.NET development. **How to develop a one-page web application**: How to work with ASP.NET web sites, How to use Visual Studio to build a web form, How to add validation controls to a form, How to add C# code to a form, How to test a web application. **How to use HTML5 and CSS3 with ASP.NET applications**: The Future Value application with CSS formatting, The HTML and CSS skills that you need. **How to develop a multi-page web application**: How to work with multi-page web sites, How to use session state. **How to test and debug ASP.NET applications**: How to test an ASP.NET web site, How to use the debugger, How to use the trace feature.

UNIT –II

How to use the standard server controls: How to use the common server controls, How to use the button controls, How to use the list controls. **How to use the validation controls**: Introduction to the validation controls, How to use the validators, Validation techniques. **How to work with state, cookies, and URL encoding**: How to use view state, How to use session state, How to use application state and caching, How to use cookies and URL encoding. **How to use master pages**: How to create master pages, How to create and develop content pages, How to customize content pages. **How to use themes**: An introduction to themes, How to work with themes and skins. **How to use site navigation and ASP.NET routing**: How to use the navigation controls, How to use ASP.NET routing, How to use the navigation controls with ASP.NET routing.

UNIT – III

An introduction to database programming: An introduction to relational databases, An introduction to ADO.NET 4.5, How to use the DataList control, How to use data binding, How to customize the GridView control, How to use the DetailsView control , How to use the FormView control. **How to use object data sources with ADO.NET**: An introduction to object data sources, How to create a data access class, A Category Maintenance application . **How to secure a web site**: An introduction to SSL, How to use a secure connection. **How to authenticate and authorize users**: An introduction to authentication, How to set up authentication and authorization, How to use the login controls. **How to use email, custom error pages, and back-button control**: How to send email, How to use custom error handling, How to handle the back-button problem.

UNIT – IV

How to configure and deploy ASP.NET applications: How to use the Web Site Administration Tool, An introduction to deployment, How to use one-click deployment, How to create and use a Setup program. **How to use ASP.NET Ajax**: An introduction to Ajax, An introduction to ASP.NET Ajax, How to use the ASP.NET Ajax server controls, An application that uses ASP.NET Ajax. **How to create and use WCF and Web API services**: An introduction to web services, How to create a WCF service, How to create a web site that consumes a WCF service, How to create a Web API service, How to create a web site that consumes a Web API service. **An introduction to ASP.NET MVC**: An introduction to MVC, An introduction to ASP.NET MVC, How to work with views, How to work with controls and postbacks.

Text Book:

1. Mary Delamater & Anne Boehm, murach‘s ASP.Net Web Programming with C#, Shroff Publishers.

Reference Books:

1. ASP.Net Black Book, Kogent Learning Solutions Inc, Dreamtech Press.
2. Jason Gaylord, Christian Wenz, Pranav Rastogi, Todd Miranda, Scott Hanselman, Professional ASP.Net in C# & VB, Wrox A Wiley Brand.
3. ASP.Net with C#, Kogent Learning Solutions Inc, Dreamtech Press.

Practical List of ASP.Net

1. Create a page in ASP.NET using VB.NET or C# to display the following Web Controls:
   - A button with text ―click me‖. The button control must be in the center of the form.
   - A label with a text hello
   - A checkbox. The form name must be Web Controls.
2. Create a page in ASP.NET using VB.NET or C# containing the following controls:
   - A ListBox
   - A Button
   - An Image
   - A Label

   The listbox is used to list items available in a store. When the user clicks on an item in the listbox, its image is displayed in the image control. When the user clicks the button, the cost of the selected item is displayed in the control.
3. Create a page in ASP.NET using VB.NET or C# that take a student name from the user, add that name in list-box control. And delete the chosen name from the list-box.
4. Create a page in ASP.NET using VB.NET or C# for book sales. Enter the quantity, title and price of the book. Calculate the extended price, discount (15%) and after discount, the actual price of the book. Show the summery of book sales. (Like total no of books, total discount given, total discounted amount and average discount.) You will need command buttons- calculate, clear sale.
5. Create a page in ASP.NET using VB.NET or C# using HTML Server controls that take user name, address, and city, state and country name from the user and display it.
6. Create a page in ASP.NET using VB.NET or C# to get a user input such as the boiling point of water and test it to the appropriate value using Compare Validator
7. Create a page in ASP.NET using VB.NET or C# that uses a textbox for a user input name and validate it for RequiredField Validation.
8. Create a page in ASP.NET using VB.NET or C# that gets user input such as the user name, mode of payment, appropriate credit card. After the user enters the appropriate values the Validation button must validates the values entered.
9. Create a page in ASP.NET using VB.NET or C# to declare one TextBox control, one Button control, one Label control, and one RegularExpressionValidator control in an .aspx file. The submit() function checks if the page is valid. If it is valid, it returns "The

page is valid!" in the Label control. If it is not Valid, it returns "The page is not valid!" in the Label control. If validation fails, the text "The zip code must be 5 numeric digits!" will be displayed in the RegularExpressionValidator control.

10. Create a page in ASP.NET using VB.NET or C# using HTML Server controls that convert given currency into another selected currency. For that you need a dropdown-list.
11. Create a page in ASP.NET using VB.NET or C# to the database with ADO.NET for Inserting Data.
12. Create a page in ASP.NET using VB.NET or C# to the database with ADO.NET for Updating Data.
13. Create a page in ASP.NET using VB.NET or C# to the database with ADO.NET for Deleting Data
14. Create a page in ASP.NET using VB.NET or C# to the database with ADO.NET for Search Data.
15. Create a page in ASP.NET using VB.NET or C# to create a proxy.
16. Create a page in ASP.NET using VB.NET or C# that has a form taking the user‟s name as input. Store this name in a permanent cookie & whenever the page is opened again, then value of the name field should be attached with the cookie‟s content
17. Create a page in ASP.NET using VB.NET or C# to run video
18. Create a page in ASP.NET using VB.NET or C# to delete all cookies of your web site that has created on the client‘s computer.
19. Create a page in ASP.NET using VB.NET or C# to the database with ADO.NET for Inserting Data.
20. Create a page in ASP.NET using VB.NET or C# to the database with ADO.NET for Updating Data.

Paper – II

Course Code – **Course Name – Information Security & Cyber Law**

	Learning Outcome

LO1	Given information on information security and threats students will be able to **understand** structure, mechanics and evolution of various crime threats and able to **remember** the security mechanism.
LO2	Given information on various security mechanism, students will be able to **define** various security tools used to protect the data
LO3	Given information on IT Act 2000 students will be able to **illustrate** different terminologies used in IT Act 2000
LO4	Given information on various tools used in security, students will be able to **recognize** which tool is best suited in field.

UNIT - I

- Information Security : Overview, need for information security, objectives of Information security. - Global information systems and their evolution, basics of information systems, role of the Internet and the World Wide Web. - Understanding about the threats to information systems security Building blocks of InfoSec, How Organizations manage security of their information systems Information security risk analysis fundamentals. - Importance of physical security and biometrics controls for protecting information systems assets. - Security considerations for the mobile work force. - Network security perspectives, networking and digital communications (overview only), security of wireless networks.

UNIT - II

- Cryptographic techniques and Encryption, Intrusion Detection Systems and Firewalls,security of virtual private networks. - Security issues in application development with emphasis on integration of enterprise applications, database security, operating security and security of electronic mailing systems. - Security models and frameworks and standards through introduction to the ISO 27001, SSE-CMM (systems security engineering – capability maturity model), COBIT (Control Objectives for Information and related technologies) and the SarbanesOxley Act (SOX) and SAS 70 (statement on auditing standards). - Privacy Fundamentals, business practice's impact on data privacy, technological impact on data privacy, privacy issues in web services and applications based on web services. - Information security best practices – staffing, audits, and disaster recovery planning and business continuity planning and asset management. - Ethical issues and intellectual property concerns for information security professionals – copy right, data protection etc. matters.

UNIT – III

- Introduction of IT Act 2000, main features of IT Act 2000, Digital Signature. - Access Control : Operating system Access Controls, Group and Roles, Access Control lists, Unix Operating System Security, Windows NT, Capabilities, Added Features in Windows 2000, Granularity, Sandboxing and Proof-carrying code,Hardware protection, Other technical Attacks. - Cryptography & PKI : Symmetric Cryptography, Asymmetric Cryptography, Keys, Hash Functions, Digital Signatures. - Distributed Systems - Concurrency, Fault Tolerance and Fault Recovery, Naming.

UNIT – IV

- Multilevel and Multilateral Security : Multilevel Security, Multilateral Security. - Electronic Banking –Banking and Bookkeeping. - Monitoring Systems –Introduction, Alarms, Prepayment Masters. - Biometrics : Physiological biometric techniques, behavioral biometric techniques, - New biometric techniques, biometric systems. - Incident Response : Incident Response, Prerequistes to planning an IRT. - Network attack and Defence : Most Common Attacks, Scripts Kiddies and Packaged Defence. - Management Issues : Organisational Issues, - Protecting E-commerce Systems – Introduction - Hacking – Introduction

Books Recommended

1. Information Systems Security Management - Nina S. Godbole (Wiley India Pvt. Ltd.)
2. Security Engineering - Ross Anderson
3. Information Security Management Handbook - Harold Tpton & Micki Krause (Auerbach Publications)
4. Network Security Essentials: Applications and Standards - W. Stallings (Pearson Education)
5. eSecurity and You - Sandeep Oberoi (Tata McGraw-Hill)
6. Cyber Laws – Singh Yatindra
7. Cyber Crime – Bansal S K
8. Cyber law , E-commerce & M-Commerce – Ahmand Tabrez
9. Handbook of Cyber and E-commerce laws – Bakshi P M & Suri R K
10. Management Fundamentals and Information Systems Dr. Sushila Madan (Taxmann‘s)

Paper – III

Course Code – **Course Name – Practical Android Programming**

	Learning Outcome
LO1	Given information on basics interface and architecture student will able to **develop** and **grasp** of the Android OS architecture (using various android views and view groups).
LO2	Given information on designing different themes for android application which help Students will able to **Understand** the handling the data by using external devices and also for the networking communication application.
LO3	Given information will help the students to **understand** the geographical locations on the maps with the help of geo-coding and reverse geo-coding as well as application will enrich with use of graphics and animation.
LO4	Given information will help Students to **Familiarize** with Android development by selecting tools for including device emulator, profiling tools and IDE as well as **Identity, analyze** data storage, retrieval, user preferences, files and content providers

UNIT - I

Getting an Overview of Android Introducing Android - Listing the Version History of Android Platform, Discussing Android APIs, Describing the Android Architecture Application Framework, Exploring the Features of Android, Discussing about Android Applications, The Application Components, The Manifest File, The Command-Line Tools, Developing and Executing the First Android Application, Using Eclipse IDE to Create an Application, Running Your Application, Exploring the Application, Using Command-Line Tools. **Using Activities, Fragments and Intents in Android -** Working with Activities, Creating an Activity, Starting an Activity, Managing the Lifecycle of an Activity, Applying Themes and Styles to an Activity, Displaying a Dialog in the Activity, Hiding the Title of the Activity, Using Intents, Exploring Intent Objects, Exploring Intent Resolution, Exploring Intent Filters, Resolving Intent Filter Collision, Linking the Activities Using Intent, Fragments, Fragment Implementation, Finding Fragments, Adding, Removing, and Replacing Fragments, Finding Activity Using Fragment, Using the Intent Object to Invoke Built-in Application. **Working with the User Interface Using Views and ViewGroups -** Working with View Groups, The LinearLayout Layout, The RelativeLayout Layout, The ScrollView Layout, The TableLayout Layout, The FrameLayout

Layout, The TabLayout Using the Action Bar, Working with Views, Using the TextView, Using the EditText View, Using the Button View, Using the RadioButton View, Using the CheckBox View, Using the ImageButton View, Using the ToggleButton View, Using the RatingBar View, Binding Data with the AdapterView Class, Using the ListView Class, Spinner, Using the Gallery View, Designing the AutoTextCompleteView, Implementing Screen Orientation, Anchoring the Views of the Current Activity, Customizing the Size and Position of the Views, Designing the Views Programmatically, Handling UI Events, Handling User Interaction with Activities, Handling User Interaction with the Views, Specialized Fragments, ListFragment, DialogFragment, PreferenceFragment, Creating Menus The Options Menu The Context Menu The SubMenus.

UNIT - II

Handling Pictures and Menus with Views - Working with Image Views, Displaying Images in the Gallery View, Displaying Images in the Grid View, Using the ImageSwitcher View, Designing Context Menu for Image View, Using the AnalogClock and DigitalClock Views, Embedding Web Browser in an Activity, Notifying the User Creating the Toast Notification, Creating the Status Bar Notification, Creating the Dialog Notification. **Storing the Data Persistently -** Introducing the Data Storage Options, Using Preferences, Using the Internal Storage Exploring the Methods Used for Internal Storage, Developing an Application to Save User Data Persistently in File, Using the External Storage Exploring the Methods Used for External Storage, Developing Application to Save File in SD Card, Using the SQLite Database Creating the Database Helper Class, Creating the Layout and Main Activity Class, Creating the Layout and Activity for the Insert Operation, Creating the Layout and Activity to Search a Record, Creating the Activity Class to Fetch All Records, Creating the Layout and Activity for the Update Operation, Creating the Layout and Activity for the Delete Operation, Executing the Database Operations, Working with Content Providers, Exploring the android.provider Package, Creating User-Defined Content Provider, Consuming User- Defined Content Provider. **Emailing and Networking in Android -** Building an Application to Send Email, Networking in Android, Getting an Overview of Networking Fundamentals, Checking Network Availability, Accessing Web Services UsingHTTP Post, Accessing Web Services Using the GET Method, Working with Binary Data and Text Files, Consuming JSON Services, Sockets Programming.

UNIT - III

Working with Location Services and Maps - Working with Google Maps, Exploring Google Maps External Library, Creating an Application Using Google Maps Android API, Disabling the Zoom Control Button, Changing the Map Type, Displaying the Specific Location and Adding Markers, Handling Map Gestures Interaction, Getting the Current Location of a User, Working with Geocoding and Reverse Geocoding. **Working with Graphics and Animation -** Working with Graphics, Drawing Graphics to Canvas, Using the Drawable Object, Referencing an Image File, Defining Drawable in XML, Using the Shape Drawable Object, Working with the Nine Patch Drawable Graphics, Understanding the Concept of Hardware Acceleration, Working with Animations, The Property Animation, View Animation Drawable Animation. Audio, Video and Camera - Role of Media Playback Using Media Player Media Formats Supported by Media Player, Preparing Audio for Playback, Preparing Video for Playback, Creating Application to Play Audio and Video Using MediaPlayer, Recording and Playing Sound, Use of Media Store Audio Recording Application, Creating a Sound Pool Using Camera for Taking Pictures, Creating Video RecordingApplication.

UNIT - IV

Threads and Services - Introducing Threads Worker Threads Using AsyncTask, Introducing Services Exploring Services Essentials, Understanding the Lifecycle of a Service, Exploring the Service Class, Introducing the Service Class, Creating a Bound Service. **Bluetooth, NFC and Wi-Fi -** Working with Bluetooth Exploring the Android Bluetooth APIs, Permissions Required to Access Bluetooth, Setting Up the Bluetooth for an Application, Identifying the Bluetooth-Enabled Devices, Querying the Paired Devices, Discovering Devices Creating an Application Using Bluetooth Functionality, Connecting the Devices Using Bluetooth for Data Transfer, Connecting as a Server Connecting as a Client Working with Bluetooth Low Energy, Working with NFC, Exploring the Basics of NFC, Developing an Application Using NFC, Working with Wi-Fi, Exploring the Wi-Fi APIs, Creating an Application Using Wi-Fi. **Telephony and SMS -** Handling Telephony Displaying Phone Information Application Receiving Phone Calls Application, Making Outgoing Phone Calls Application, Handling SMS Sending SMS Using SmsManager, Sending SMS Using Intent, Receiving SMS Using the BroadcastReceiver Object, Role of Default SMS Providers. Hardware Sensors - Introducing

Sensors Exploring the Sensor Framework, Managing Various Sensor Configurations, Understanding the Sensor Coordinate System.

Text Book:

1. Rradeep Kothari, Android Application Development – Black Book, Dreamtech Press.

Reference Books:

2. Prasanna Kumar Dixit, Android, Vikas Publishing.
3. Dawn Griffiths & David Griffiths, Head First Android Development, Shroff Publishers.
4. Ed Burnette, Hello Android, Shroff Publishers.
5. Jerome DiMarzio, Android – A Programmer‘s Guide, McGraw-Hill.
6. Dave MacLean, Satya Komatineni, Grant Allen, Pro Android 5, Apress.
7. Reto Meier, Professional Android Application Development, Wiley.

Practical List of Android Programming

1. Create ―Hello World‖ android application. That will display ―Hello World‖ in the middle of the screen in the red color with white background.
2. Write an android application to understand Activity, Intenta. Create sample application with login module. (Check username and password) and on successful login, go to next screen. And on failing login, alert user using Toast. Also pass username to next screen.
3. Create an android application that will change color of the screen and change the font size of text view using xml.
4. Create login android application where you will have to validate EmailID (UserName). Till the username and password is not validated, login button should remain disabled.
5. Create and login android application as above. On successful login, open browser with any URL.
6. Create an android application that will pass some number to the next screen, and on the next screen that number of items should be display in the list.
7. Create an android application that will change color of the screen, based on selected options from the menu.
8. Create an android application that will display toast (Message) on specific interval of time.

9. Create a android background application that will open activity on specific time.
10. Create an android application that will have spinner with list of animation names. On selecting animation name, that animation should affect on the images displayed below.
11. Create an android UI such that, one screen have list of all the types of cars. and on selecting of any car name, next screen should show Car details like : name, launched date, company name, images(using gallery) if available, show different colors in which it is available.
12. Write an android application to read phonebook contacts using content providers and display in list.
13. Write an android application to read messages from the mobile and display it on the screen.
14. Create an android application to call specific entered number by user in the EditText
15. Create an android application that will create database with table of User credential.
16. Create an android application to read file from asset folder and copy it in memory card.
17. Create an android application that will play a media file from the memory card.
18. Create an android application to make Insert, update, Delete and retrieve operation on the database.
19. Create an android application to read file from the sdcard and display that file content to the screen.
20. Create an android application to draw line on the screen as user drag his finger.
21. Create an android application to send message between two emulators.
22. Create an android application to take picture using native application.
23. Create an android application to pick up any image from the native application gallery and display it on the screen.
24. Create an android application to open any URL inside the application and clicking on any link from that URl should not open Native browser but that URL should open the same screen.
25. Create an android application that will create database with table of User credential.

Paper – 1II

Course Code – **Course Name – Angular JS**

	Learning Outcome

LO1	Given information on basics of Angular JS student will be able to **design** the page and **apply** in real time applications
LO2	Given information on directives, controllers and modules student will be able to **Create** and **Use** while design their web page or web application
LO3	Given information on Forms and Dependency, students will be able to **design** Form with all validations and be able to **create** services.
LO4	Given information on application building student will be able to **create** single page application with animations

UNIT - I

Angular JS Basics - What is Angular JS? Why Angular JS? Why MVC matters, MVC-The Angular JS way Features of Angular JS, Model-View-Controller, My First Angular JS app.

Angular Expressions - All about Angular Expressions, How to use expressions, Angular vs JavaScript

Filters - Built-In Filters, Using Angular JS Filters, Creating Custom Filters

UNIT - II

Directives - Introduction to Directives, Directive Lifecycle, Binding controls to data, Matching directives, Using Angular JS built-in directives, Creating a custom directive

Controllers - Role of a Controller, Controllers & Modules, Attaching Properties and functions to scope, Nested Controllers, Using Filters in Controllers, Controllers in External Files

Angular JS Modules - Introduction to Angular JS Modules, Bootstrapping Angular JS

UNIT - III

Angular JS Forms - Working with Angular Forms, Model Binding, Forms Events, Updating Models with a Twist, Form Controller, Validating Angular Forms, $error object

Scope - What is scope, Scope Lifecycle, Scope Inheritance, Scope & Controllers, Root scope, Scope Broadcasting, Two-way data binding, Scope Inheritance, Scope & Directives, $apply and $watch, Scope Events

Dependency Injection & Services - What is Dependency Injection, Creating Services, Factory, Service & Provider, Using Dependency Injection, What are services, Using Angular JS built in services

UNIT - IV

Single Page Application (SPA) - What is SPA, Pros and Cons of SPA, Passing Parameters, Changing location, Installing the ng Route module, Configure routes, Resolving promises, creating a Single Page Apps

Angular JS Animation- Animate Module, CSS Transforms, CSS Transitions, Applying Animations

Reference Books

1. The Complete Guide to Angular Paperback – 6 February 2018 by Felipe Coury, Ari Lerner and Carlos Taborda
2. Angular in Action Paperback – Import, 2 April 2018 by Jeremy Wilken
3. Angular: From Theory To Practice: Build the web applications of tomorrow using the Angular web framework from Google. Kindle Edition by Asim Hussain
4. Angular 6 for Enterprise-Ready Web Applications: Deliver production-ready and cloud-scale Angular web apps 1st Edition, Kindle Edition by Doguhan Uluca
5. Angular: Up and Running: Learning Angular, Step by Step 1st Edition, Kindle Edition by Shyam Seshadri
6. Pro AngularJS (Expert's Voice in Web Development) Paperback – 7 April 2014 by Adam Freeman
7. Angular Development with TypeScript Paperback – 17 December 2018 by Yakov Fain and Anton Moiseev

Practical List of Angular JS

1. Design Order Form with a total price updated in real time, which contains name of five products and their prices. Create a bill amount for all the products, calculate GST on the billing amount, and display total amount.
2. Implement Angular JS to create your Resume.
3. Use Practical No.01 and initialize prices to 0 (zero) when form loads. (Use module, controller & directive).
4. Design a webpage which takes one number as an input and generate its factorial number (use module, controller).
5. Design a webpage, which takes inputs product name, product quantity and price. Generate table of entered values. When user clicks on table column title, it should sort that column values. (Use filter, array).
6. Design a webpage which display product name and product price using AngularJS $http Service from database. Display the content in tabular format.
7. Write a program to create notepad application using Angular JS
8. Write a program in Angular JS to create Navigation Menu that highlights the selected entry.
9. Write a program in Angular JS to create a simple inline editor - clicking a paragraph will show a tooltip with a text field.
10. Write a program in Angular JS to design an order form with a total price updated in real time, using filters.
11. Write a program in Angular JS to filter a list of items by typing into a text field
12. Write a program in Angular JS to change name using JS Controller.
13. Write a program in AngularJS to enter the text in the input field. & Angular JS will display an error message if the entered text is invalid.
14. Write a program in Angular JS to hide a Div by adding checkbox.
15. Write a program in Angular JS to print “Hello World”
16. Write a program in Angular JS to design cost calculator.
17. Write a program in Angular JS to change the color of input box by changing its value.

Annexure – (I)

DETAILS OF 'ON JOB TRAINING/SUMMER INTERNSHIP PROJECT', *'FIELD PROJECT', 'COMMUNITY ENGAGEMENT PROJECT' AND 'RESEARCH PROJECT'*

****

[A] GUIDELINES FOR 'ON JOB TRAINING/SUMMER INTERNSHIP PROJECT/FIELD PROJECT/COMMUNITY ENGAGEMENT PROJECT

Semester II – 4 Credits

1. **Learning Outcomes**

CO1	Student will be able to construct and explain the company profile by compiling the brief history, management structure, products / services offered, key achievements and market performance for his / her organization of Internship/OJT **OR** Student will be able to describe the UN SDG to which the *'Field Project'*, or *'Community Engagement Project'* is related.
CO2	For his / her organization of internship/OJT, the student will be able to assess its Strengths, Weaknesses, Opportunities and Threats (SWOT). **OR** Student will be able to list the goals, objectives or outcomes of the *'Field Project'*, or *'Community Engagement Project'* undertaken by him
CO3	Student will be able to determine the challenges and future potential for his / her Internship/OJT organization in particular and the sector in general. **OR** Student will be able to describe the profile of respondents / community involved in the *'Field Project'*, or *'Community Engagement Project'* undertaken by him
CO4	Student will be able to correlate theoretical classroom learning and its application in practical situations by accomplishing the tasks undertaken during On Job Training/Summer Internship Project', 'Field Project', or 'Community Engagement Project'.
CO5	Student will be able to apply various soft skills such as time management, positive attitude, and communication skills during performance of the tasks assigned during On Job Training/Summer Internship Project', 'Field Project', or 'Community Engagement Project'
CO6	Student will be able to suggest improvements in processes/systems at the Organization[s]/Community where On Job Training/Summer Internship Project', 'Field Project', or 'Community Engagement Project' is undertaken

2. Every student admitted to M. Com. Second Semester is compulsorily required to undergo this course bearing 4 credits.
3. At the end of second semester, all students will have to undergo summer training of 6-8 weeks (120 Hours) with an industrial, business or service organization by taking a project study.
4. The condition of successfully completing the program shall not be deemed to have been satisfied unless a student undergoes summer training under the supervision of the department executive in organizations as approved by the Director/ Principal/ Head / Faculty from time to time. Alternatively, Director/ Principal/ Head / Faculty of the Department/ College/ Institute may allocate the sector/ industry/ company specific project to the individual student
5. Each student will be required to submit a detailed report to the Department/ College/ Institute for the work undertaken during this period within 7 days of completion of the training following which the evaluation and assessment for OJT/S P will be done by the college/institute concerned. The

Report submitted must be according to the Learning outcomes and in tune with the rubric for evaluation.

6. A student is also allowed to conduct a Field Project or Community Engagement Project in lieu of On Job Training. However, such a Filed or Community Engagement Project need to have a duration of 6-8 weeks (120 Hours) and a student is required to submit the report to college/institute as mentioned above.
7. College/Institute is required to assign Supervisor/Mentor to students for OJT/SIP/FP/CEP who will guide the students in attaining the outcomes of this course.
8. The College/Institute, on receipt of the report from student, shall immediately schedule the open defence seminar by a student.
9. The open defence seminar by a student shall be evaluated by the supervisor/mentor assigned to a student (as an internal examiner) and an external examiner appointed by the college/institute.
10. **Appointment of External Examiner:** It is desirable to appoint an external examiner from the company/organization where a student has completed his 'OJT/SIP/FP/CEP'. However, the Principal may appoint any other industry professional or subject expert as an external examiner. The remuneration (Rs. 100 per student), TA/DA or Conveyance Allowance to external examiner may be paid by the college/institute which will be reimbursed by the university as per established rules.
11. The Internal Examiner and External Examiner shall jointly evaluate the report submitted by the student and her/his seminar and shall immediately submit the evaluation report in the prescribed format provided along with.
12. The College/Institute shall submit marks obtained by students to the university as per prevalent system within 3 days of evaluation.

[A-1] EVALUATION REPORT OF SUMMER INTERNSHIP/ON JOB TRAINING

Master of Commerce (Major Subject) Examination,_____

Name of Student: _____

OJT/SIP Title: _____

Roll No._____ **Max. Marks: 100**

CRITERION	Parameters	Score out of 20
Description of Organizational Profile	Company profile, Historical evolution, Management structure, Organization structure, Products / services offered, Key achievements, Market performance	
Analysis of organization & Sector.	SWOT analysis, Key challenges & opportunities, Company Analysis, Sector Analysis, Competitive analysis	
Application of theoretical knowledge.	Details of the work done, Job Description, specification. Project implemented. Identify the various issues in organization and its processes.	
Conclusions and Recommendations	Specific Conclusions based on empirical evidences. Recommendations based on practical feasibility	
Feedback from organization.	Authentic Company Certificate of completion clearly classifying the performance of the student as **Excellent / Above Average** or **Good/ Average** or **Satisfactory /below average.**	

Total Marks Scored out of 100	
Name and Signature of Internal Examiner	Name and Signature of External Examiner

Rubric for Evaluation of Summer Internship/On Job Training

Criterion	Substantial Achievement (16-20 Marks)	Moderate Achievement (10-15 Marks)	Poor Achievement (0-9 Marks)
Description of Organizational Profile	Writes a clear description of company profile including its history, management structure, products/services offered, key achievements and market performance	Writes a limited description of company profile. However, a majority of the points are covered	Writes a very brief description of company profile excluding majority of the points
Analysis of Organization and Sector	Performance a SWOT analysis for the company and presents all the key challenges & opportunities of the sector in general and company in particular	A limited analysis of the company and the sector is performed. All the key elements of challenges & opportunities have not been identified	Is unable to perform a proper SWOT analysis and identify the challenges & opportunities of the sector in general and company in particular
Application of theoretical knowledge	Details of the work done or project implemented during internship is documented in detail. Theoretical basis is used to identify the various issues in organization and its processes	Work done or project implemented during internship is documented but with limited details. No proper theoretical basis for identification of issues in organization and its processes	Documentation o work done or project implemented during internship is vaguely defined. No attempt has been made to relate theory with organizational or procedural problems
Conclusions and Recommendations	Conclusions drawn are not global but specific and based on empirical evidences. Recommendations given are practical and methodology of implementing the same is discussed	Conclusions drawn are specific but empirical evidences are not properly presented. Recommendation s given seem to be practical and feasible. However,	Conclusions drawn are of global nature not based on empirical evideences. Recommendations given don't seem practical and feasibility and methodology of implementing the same is not discussed

		methodology of implementing the same is not discussed	
Feedback from Organization	Overall Performance Feedback from organization is "Excellent or Above Average"	Overall Performance Feedback from organization is "Good or Average"	Overall Performance Feedback from organization is "Satisfactory or below average"

[A-2] EVALUATION REPORT OF FIELD PROJECT/COMMUNITY ENGAGEMENT PROJECT

Master of Commerce (Major Subject) Examination, _____

Name of Student: _____

FP/CEP Title: _____

Roll No._____ **Max. Marks: 100**

CRITERION	Parameters	Score out of 20
Description UN SDG Related to FP/CEP	Detailed Description of **ALL** UN SDGs related to FP/CEP Undertaken by the student. The degree and extent of such related SDGs should be clearly mentioned	
Description of Respondent Profile/Community Profile & Listing of goals/objectives/Outcomes of FP/CEP	A detailed description (including Statistical Data) of the respondents / community where the FP/CEP is being undertaken Clear Mention of issues/problems under study to be included. Comprehensive Listing of goals/objectives/Outcomes of FP/CEP	
Application of theoretical knowledge.	Details of the work done or project implemented during FP/CEP is documented in detail. Theoretical basis is used to identify the various issues related to problem under consideration	
Conclusions and Recommendations	Specific Conclusions based on empirical evidences. Recommendations based on practical feasibility	
Feedback from concerned organization/Community Head	Authentic Company Certificate of completion /appreciation clearly classifying the performance of the student as **Excellent / Above Average** or **Good/ Average** or **Satisfactory /below average.**	
	Total Marks Scored out of 100	

Name and Signature of Internal Examiner

Name and Signature of External Examiner

RUBRIC FOR EVALUATION OF FIELD PROJECT/COMMUNITY ENGAGEMENT PROJECT

Criterion	Substantial Achievement (16-20 Marks)	Moderate Achievement (10-15 Marks)	Poor Achievement (0-9 Marks)
Description UN SDG Related to FP/CEP	Written a clear description of UN SDG(s) associated with the project	Writes a limited description of UN SDG(s) associated with the project. However, a majority of the points are covered	Writes a very brief description of UN SDG(s) associated with the project excluding majority of the points
Description of Respondent Profile/Community Profile & Listing of goals/objectives/Outcomes of FP/CEP	Written Detailed and statistical Description of Respondent Profile/Community Profile & Clear Listing of goals/objectives/Outcomes of FP/CEP	Written Detailed but non-statistical Description of Respondent Profile/Community Profile & Clear Listing of goals/objectives/Outcomes of FP/CEP	Written brief and non-statistical Description of Respondent Profile/Community Profile & unclear Listing of goals/objectives/Outcomes of FP/CEP
Application of theoretical knowledge	Details of the work done or project implemented during FP/CEP is documented in detail. Theoretical basis is used to identify the various issues related to problem under consideration	Work done or project implemented during FP/CEP is documented but with limited details. No proper theoretical basis for identification of issues related to problem under consideration	Documentation of work done or project implemented during FP/CEP is vaguely defined. No attempt has been made to relate theory with Community or procedural problems
Conclusions and Recommendations	Conclusions drawn are not global but specific and based on empirical evidences. Recommendations given are practical and methodology of implementing the same is discussed	Conclusions drawn are specific but empirical evidences are not properly presented. Recommendations given seem to be practical and feasible. However, methodology of implementing the same is not discussed	Conclusions drawn are of global nature not based on empirical evidences. Recommendations given don't seem practical and feasibility and methodology of implementing the same is not discussed
Feedback from concerned organization(s)/Community Head(s)	Overall Performance Feedback from concerned organization(s) and or Community Head(s) is "Excellent or Above Average"	Overall Performance Feedback from concerned organization(s) and or Community Head(s) is "Good or Average"	Overall Performance Feedback from concerned organization(s) and or Community Head(s) is "Satisfactory or below Average"

[B] GUIDELINES FOR RESEARCH PROJECT

Semester III – 4 Credits

Semester IV – 6 Credits

1. Learning Outcomes:

On completion of the research project, the learner will be able to –	
CO1	Formulate a research problem statement under a given state of conditions
CO2	Carry out Review of Literature in the context of defined research problem and identify research gap
CO3	Develop Constructs, design data collection instruments and collect data using appropriate sampling technique and procedure
CO4	Analyse data to arrive at meaningful findings and conclusions using appropriate statistical tools with reference to defined research problem
CO5	Write a project report explaining research problems, hypotheses (if any), data collection, analysis of data, findings, conclusions, and recommendations
CO6	Defend the research design, methods, and findings in the Open Defence Examination

2. The research project is a compulsory course carrying 10 credits (3rd Semester – 4 Credits and 4th Semester – 6 Credits) to become eligible for award of degree of Master of Commerce under this scheme of examination.
3. The research project of a student should be corresponding to the 'Major Subject' selected by a student.
4. College/Institute is required to assign Supervisor to students for Research Project who will guide the students in attaining the outcomes of this course. One such supervisor can supervise maximum 20 students in a session.
5. Appointment of Supervisor: A supervisor shall be a full-time teacher working with the college/institute concerned. However, in case of non-availability of adequate number of full-time teachers, an ad-hoc or CHB teacher can be appointed as a supervisor. In certain cases, an industry professional or subject expert can also be appointed as a supervisor by the Principal of college. Supervisors shall not claim any additional remuneration/honorarium for guiding students.
6. Guidelines for Research Project:
   a. Objective:- Every student will be assigned a project in 3rd and 4th Semesters and it will be pursued by him/her under the supervision of an internal supervisor. The objective of the Project Work is to help the student develop his/her ability to apply multidisciplinary concepts, tools and techniques to solve organizational problems and/or to evolve new/innovative theoretical frame work.
   b. Types of Project: The Project may take any one of the following forms (not limited to these):
      i. Comprehensive case study (covering single organization/ multifunctional area problem, formulation, analysis and recommendations)
      ii. Inter-organisational study aimed at inter-organisational comparison/ validation of theory/survey of management services.
      iii. Evolution of any new conceptual / theoretical framework, iv) Business Plan/Viability Studies
      iv. Field study (Empirical study)
      v. Software analysis, Design and solutions for organisational achievement (Applicable to IT/Ecommerce)
   c. Selection of Project Topic –
      • Project topic has to be selected with respect to the programme of study and area elected by the student.
      • Title of the project should clearly specify the objective and scope of the study. It should be specific and neither too vague nor centralistic. The topics should be designed meticulously. It can be designed like "Employee Welfare Measures" – A case study of XYZ Ltd.

• Project selection has to be made in consultation with the supervisor who will act as a Project guide for the student. The Project Guide/Supervisor shall approve the title and project synopsis in the initial phase of the project.

d. Scope of Work: - The student is expected to carry out following activities in the project:
   1. Prepare a synopsis and get it approved by the supervisor as assigned by the respective Institutes. **Approved synopsis shall be part of final report as appendix.**
   2. Undertake a detailed literature survey on the subject matter.
   3. Make relevant data collection/observation.
   4. Consult experts of the field.
   5. Visit related organizations/institutions/industries.
   6. Compile data in proper format.
   7. Make proper conclusion/recommendations.
   8. Prepare a Project Report.
   9. The volume of the project-report should be ranging from 60-80 pages.
   10. Obtain approval of Project Report by project supervisor.
   11. Submit a hard bound copy of the Project Report at the Institute.

e. **Submission of the Research Project Report:** Every student shall submit a Hard Copy of the Research Project Report duly signed by the student and supervisor to the college/institute one month prior to the date of the commencement of the 3rd and 4th Semester Examinations for M. Com. Following documents are required to be submitted with the Research Project Report:
   i. A certificate from the Supervisor to the effect that the candidate has satisfactorily completed the Project work for not less than one session and that the Project work is the result of the candidates own work and is of sufficiently high standard to warrant its presentation for examination.
   ii. A declaration by the candidate that the Project is the result of his/her own research work and the same has not been previously submitted to any examination of this University or any other University. The Project shall be liable to be rejected and /or cancelled if found otherwise.
   iii. A certificate obtained through anti-plagiarism software stating that the original content of the project work report is more than 80% must be attached at the beginning of the project report and/or A certificate from the Supervisor to the effect that the candidate has not copied / plagiarised the contents of project report and that the supervisor has ensured the originality & authenticity of data /contents incorporated in the project report.

f. General Format of the Report: The project report should preferably be written in the following format (The format may vary depending on the nature of research topic):
   i. Executive Summary
   ii. Introduction to topic
   iii. Research Methodology
   iv. Analysis and Findings of the study
   v. Conclusions and Recommendations
   vi. Bibliography

7. The College/Institute, on receipt of the report from student, shall schedule the open defence seminar by a student before commencement of Session End Examination.

8. The open defence seminar by a student shall be evaluated by the supervisor/mentor assigned to a student (as an internal examiner) and an external examiner appointed by the college/institute.
9. **Appointment of External Examiner:** The External Examiner for evaluation of Research Project Report shall be appointed by the University through its established rules and procedures. The remuneration (Rs. 100 per student), TA/DA or Conveyance Allowance to external examiner may be paid by the college/institute which will be reimbursed by the university as per established rules
10. The Internal Examiner and External Examiner shall jointly evaluate the report submitted by the student and her/his seminar and shall immediately submit the evaluation report in the prescribed format provided along with.
11. The College/Institute shall submit marks obtained by students to the university as per prevalent system within 3 days of evaluation.

DETAILS OF OJT/PROJECT AND IKP FOR M. COM. (ALL MAJOR SUBJECTS)

Semester-____ Master of Commerce (M. Com) (OBE-NEP) Summer-20__
EVALUATION REPORT OF PROJECT REPORT & VIVA VOCE OF 100 MARKS

Major: _____

Name of Student: _____

Roll No._____

Project Title: _____

Name of the Supervisor: _____

Parameters	Score out of	Marks Scored
Research Project Proposal/Synopsis (SUBMITTED AND ATTACHED AS ANNEXURE TO PROJECT REPORT) Identification of Problem Domain Research Gap Objectives Methodology Research Frame Sampling Method, Sample Size, Sample characteristics, Sample Frame Rationalization of Objectives and Methodology Steps to solve the defined problem Data collection Methods Primary & Secondary Data Targeted Respondent Population Clarity About Data Collection Tools & Techniques Classification & Graphical Representation of data Hypothesis Testing Concluding Remarks **Proposed Chapter Scheme** **Literature Review** Data to be collected from authenticated sources Literature Review with respect to Research gap Focused Information to be gathered from multiple reliable Secondary data sources The researcher needs to review at least 10 Research papers related to the specified research topic published in last 5 years	20 Marks 10 Marks	
Data Collection, Field Work & Analysis Questionnaire formulation & Designing Pilot Study and Application Field Visit and data collection Data Reliability & Validity Data Sanctification Classification & graphical Representation Hypothesis Testing Conclusion & Finding	25 Marks	
Project Report and References Declarations and Undertaking/Plagiarism Report Project report in the specified format References and citations Annexures	10 Marks	
Discussion and Specific Conclusions Future work outline	10Marks	
Oral Presentation and viva voce Contents of presentations Communication & Delivery Q & A	25 Marks	
	TOTAL MARKS SCORED OUT OF 100	
Name & Signature of External Examiner	**Name & Signature of Internal Examiner**	

IMPORTANT NOTE: Above format shall be used separately for 3rd and 4th semesters as a student is carrying out different projects in these semesters.

Rubric for Evaluation of Research Project Work

	Excellent (80-100% Marks)	Good (60-79% Marks)	Average (50-59% Marks)	Poor (Less than 50% Marks)
Synopsis: Identification of Problem Domain and Detailed analysis of Feasibility, Objectives and Methodology of Project Proposal	• Detailed and extensive explanation of the purpose and need of the project • Detailed and extensive explanation of the specifications and the limitations of the existing Systems • All objectives of the proposed work are well defined;	• Good explanation of the purpose and need of the project • Collects a great deal of information and good study of the existing systems; • Good justification to the objectives; Methodology to be followed is specified but detailing is not done	• Average explanation of the purpose and need of the project; • Moderate study of the existing systems; collects some basic information • Incomplete justification to the objectives proposed; Steps are mentioned but unclear; without justification to objectives	• Moderate explanation of the purpose and need of the project • Explanation of the specifications and the limitations of the existing systems not very satisfactory; limited information
Quantity & Quality of Literature Review	• Information is gathered from multiple research-based sources	• Information is gathered from multiple sources.	• Information is gathered from a limited number of sources.	• Information is gathered from a single source.
Project Report and References	• Project report is according to the specified format • References and citations are appropriate and well mentioned	• Project report is according to the specified format • References and citations are appropriate but not mentioned well	• Project report is according to the specified format but some mistakes • In-sufficient references and citations	• Project report not prepared according to the specified format • References and citations are not appropriate
Discussion and Conclusions	• Discussion and conclusions tie the problem statement, experiments, and results well to tell an overall story. • Future work clearly outlined;	• Some discussion and conclusions drawn, but missing some points/ terms of linkage of results to problem statement	• Major components missing in the discussion *Little attempt to tie together experiments and problem statement/claims	• Little discussion or conclusions drawn.
Oral Presentation	• Contents of presentations are appropriate and well Delivered • Clear voice with	• Contents of presentations are appropriate but not well delivered • Eye	• Contents of presentation are appropriate but not well delivered • Eye	• Contents of presentations are not appropriate and not well delivered

and viva voce	good spoken language and eye contact with Audience • Comprehensive Q&A for all questions	contact with only few people and unclear voice • Comprehensive Q&A for some questions	contact with only few people and unclear voice • Average Q&A	• Poor eye contact with audience and unclear voice • Poor Q&A

Annexure - IV

M. Com. Semester - I

C 4- Research Methodology

(Common for all Major Subjects)

Course Outcomes (COs)/Learning Outcomes: On successful completion of this course, the learner will be able to:-	
CO 1	Formulate a research problem and identify appropriate research design for a specific research problem
CO 2	Construct a data collection tool and identify appropriate processing tools for verification of hypothesis
CO 3	Articulate research findings and be able to present the findings in research report
CO 4	Understand various dimensions related to Intellectual Property Rights

Unit I: Concept of Research

Meaning, objectives and types of research, research approach, motivation of research, research process, research plan and design, Research problem selection, definition techniques, components of research design, features of good design, steps in sample design, characteristics of good sample design, probability and non probability sampling

Unit II: Data collection

Measurement and scaling techniques, scaling and scale construction techniques. Methods of data collection, use of computers and IT in data collection, field work, survey plan, data coding, editing, tabulation, analysis of data, Data collection and processing tools of analysis, Hypothesis testing- concept of hypothesis, characteristics of hypothesis, hypothesis formulation, procedure for hypothesis testing, Use of statistical techniques for testing of hypothesis.

Unit III: Report writing

Qualities of Good report, layout of a project report, preparing research reports, concepts of report, format orders, steps in report writing, precautions in report writing, Plagiarism, prefacing, Bibliography, referencing, citation, software packages, Research prospects in commerce.

Unit IV : IPR

Concept of intellectual property, types of intellectual property, patents copy right, types and features, significance of IPR, Global and Indian scenario of intellectual property, process of filing patents and copy right, regulatory organisation governing intellectual property in India.

Reference Books:

1. Business Research Methods – Donald Cooper & Pamela Schindler, TMGH, 9th edition
2. Business Research Methods – Alan Bryman & Emma Bell, Oxford University Press
3. Research Methodology – C.R.Kothari
4. Select references from the Internet

Question Paper Pattern

Time - 3 Hrs. Max. Marks -80

Q. 1 A) Unit I ---------- 8 Marks

B) Unit I ---------- 8 Marks

OR

C) Unit I ---------- 16 Marks

Q2 A) Unit II ---------- 8 Marks

B) Unit II ---------- 8 Marks

OR

C) Unit II ---------- 16 Marks

Q.3. A) Unit III ---------- 8 Marks

B) Unit III ---------- 8 Marks

OR

C) Unit III ---------- 16 Marks

Q.4. A) Unit IV ---------- 8 Marks

B) Unit IV ---------- 8 Marks

OR

C) Unit IV ---------- 16 Marks

Q.5. A) Unit I ---------- 4 Marks

B) Unit II---------- 4 Marks

C) Unit III---------- 4 Marks

D) Unit IV---------- 4 Marks

M.COM (Computer Management)
W.E.F.2023-24

Program Specific Outcomes

PSO 1	The student will be able to transform complex business scenarios and contemporary issues into problems, investigate, understand and propose integrated solutions using emerging technologies.
PSO 2	Design and development of solutions by applying computer skills, knowledge of quantitative techniques in computer and management applications in practice.
PSO 3	The student will be able to develop a product or process by applying knowledge of programming, web, database, human computer interaction, and networking & security tools.
PSO 4	The student will be able to contribute to research in their chosen field, function, and communicate effectively, to perform both individually and in a multi-disciplinary team.
PSO 5	The student will be able to make decisions related to work that demonstrate intellectual curiosity, a commitment to lifelong learning in students and understanding of being an ethical computing professional with societal and environmental concerns.

Teaching and Examination Scheme

A teaching and examination scheme for students admitted to the M. Com. (Computer Management) Program shall be as follows:

Master of Commerce (Computer Management)

Semester I

Sr. No.	Course Type	Subjects	Course Code	Teaching Scheme			Examination Scheme					Credits
				Total Hours Per Week			Max. Marks SEE (TH) *	Max Marks SEE (PR)	Max. Marks (CIE)	Total Marks	Min. Passing Marks	
				Theory	Practical	Total						
1.	Core	Python Programming		4	-	4	80	-	20	100	40	4
2.	Core	Practical Python Programming		-	8	8	-	100	-	100	50	4
3.	Core	Cloud Computing		4	-	4	80	-	20	100	40	4
4.	Elective	Practical Advance Java Practical React JS		-	8	8	-	100	-	100	50	4
5	Core	Research Methodology		4	-	4	80	-	20	100	40	4
				12	16	28	240	200	60	500	250	20

* Semester End Examination which is mandatorily required to be appeared by every student

Note:

1. TH = Theory, CIE= Continuous Internal Evaluation
2. SEE for Theory as well as Practical examinations as mentioned above shall be conducted by the University for all semesters and the CIE shall be conducted by colleges on behalf of the University for all Semesters.

Master of Commerce (Computer Management)
Semester II

Sr. No.	Course Type	Subjects	Course Code	Teaching Scheme			Examination Scheme					Credits
				Total Hours Per Week			Max. Marks SEE (TH) *	Max Marks SEE (PR)	Max. Marks (CIE)	Total Marks	Min. Passing Marks	
				Theory	Practical	Total						
1	Core	ASP.Net		4	-	4	80	-	20	100	40	4
2	Core	Practical ASP Net		-	8	8	-	100		100	50	4
3.	Core	Information Security & Cyber Law		4	-	4	80	-	20	100	40	4
4.	Elective	Practical Android Programming Practical Angular .5		-	8	8	-	100		100	50	4
5.	Core	On Job Training		-	8	8	-	100	-	100	50	4
				8	24	32	160	300	40	500	250	20

* Semester End Examination which is mandatorily required to be appeared by every student

Note:

1. TH = Theory, CIE= Continuous Internal Evaluation
2. SEE for Theory as well as Practical examinations as mentioned above shall be conducted by the University for all semesters and the CIE shall be conducted by colleges on behalf of the University for all Semesters.

Master of Commerce (Computer Management)
Semester III

Sr. No.	Course Type	Subjects	Course Code	Teaching Scheme	Examination Scheme				Credits
				Total Hours Per Week	Max Marks	Max Marks	Total Marks		

				Theory	Practical	Total	SEE (TH) *	SEE (PR)	Max. Marks (CIE)		Min Passing Marks	
1	Core	Advance Database Management System		4	-	4	80	-	20	100	40	4
2.	Core	Practical – SQL & PL/SQL		-	8	8		100		100	50	4
3.	Core	Management Information System		4	-	4	80	-	20	100	40	4
4.	Elective	Data Communication & Computer Network		4	-	4	80	-	20	100	40	4
		Intelligent System (AI)										
5.	Core	Research Project		-	8	8	-	100	-	100	50	4
				12	16	28	240	100	60	500	250	20

* Semester End Examination which is mandatorily required to be appeared by every student

Note:

1. TH = Theory, CIE= Continuous Internal Evaluation
2. SEE for Theory as well as Practical examinations as mentioned above shall be conducted by the University for all semesters and the CIE shall be conducted by colleges on behalf of the University for all Semesters.

Master of Commerce (Computer Management)
Semester IV

Sr. No.	Course Type	Subjects	Course Code	Teaching Scheme			Examination Scheme					Credits
				Total Hours Per Week			Max. Marks SEE (TH) *	Max Marks SEE (PR)	Max. Marks (CIE)	Total Marks	Min Passing Marks	
				Theory	Practical	Total						
1	Core	Software Engineering		4	-	4	80	-	20	100	40	4
2	Core	Mobile Computing		4	-	4	80	-	20	100	40	4
3.	Core	Big Data & Hadoop		4	-	4	80	-	20	100	40	4
4.	Elective	Practical Ruby on Rail		-	8	8	-	100	-	100	50	4
		Practical Web with Word Press										
5	Core	Research Project		-	12	12	-	100	-	100	50	6
				12	20	32	240	200	60	500	250	22

* Semester End Examination which is mandatorily required to be appeared by every student

Note:

1. TH = Theory, CIE= Continuous Internal Evaluation
2. SEE for Theory as well as Practical examinations as mentioned above shall be conducted by the University for all semesters and the CIE shall be conducted by colleges on behalf of the University for all Semesters

QUESTION PAPER PATTERN
First / Second / Third / Fourth Semester
Master of Commerce (Computer Management) - M.Com.(CM)
OB & CBCS Examination

Time: 3 Hours **Total Marks: 80**

N. B. - a) Draw well labeled diagram wherever necessary.

b) All questions are compulsory.

Q1. **8 x 2 = 16**

N. B. – 1. Each question carries two marks.

2. Answers should not more than five lines.

A. Unit I

B. Unit I

C. Unit II

D. Unit II

E. Unit III

F. Unit III

G. Unit IV

H. Unit IV

Q2. **8 x 3 = 24**

N. B. – 1. Each question carries three marks.

2. Answers should not more than ten lines.

A. Unit I
B. Unit I
C. Unit II
D. Unit II
E. Unit III
F. Unit III
G. Unit IV
H. Unit IV

N. B. – 1. Each question carries five or ten marks.

2. Answers should not more than 250 words for 5 marks questions and 600 words for 10 Marks questions respectively.

Q3. **Either**

(A) 5 Unit I

(B) 5 Unit I

OR

(C) 10 Unit I

Q4. **Either**

(A) 5 Unit II

(B) 5 Unit II

OR

(C) 10 Unit II

Q5. **Either**

(A) 5 Unit III

(B) 5 Unit III

OR

(C) 10 Unit III

Q6. **Either**

(A) 5 Unit IV

(B) 5 Unit IV

OR

(C) 10 Unit IV

Master of Commerce (Computer Management) – M.Com(CM)

Semester – I

Paper – I

Course Code –

Course Name – Python

	Learning Outcome
LO1	Given information on different types of programming languages so that Students will be able to **distinguish** the high-level language and **understand** the benefits of using python for development of application program.
LO2	Given information on control statements of program student will be able to understand the program flow and will able to **implement** various control statement and functions for effective code design.
LO3	Given information on advance program structure Students will able to **interpret** multiple data structured elements while developing real life application for business solution.
LO4	Given information on basics of object oriented programming student will be able **create and use** different types of objects, classes and File handling operations for redesigning the program structure.

UNIT - I

The Way of the Program - The Python Programming Language, What Is a Program?, What Is Debugging?, Syntax Errors, Runtime Errors, Semantic Errors, Experimental Debugging, Formal and Natural Languages, The First Program. **Variables, Expressions, and Statements** - Values and Types, Variables, Variable Names and Keywords, Operators and Operands, Expressions and Statements, Interactive Mode and Script Mode, Order of Operations, String Operations, Comments. **Functions** - Function Calls, Type Conversion Functions, Math Functions, Composition, Adding New Functions, Definitions and Uses, Flow of Execution,

Parameters and Arguments, Variables and Parameters Are Local, Stack Diagrams, Fruitful Functions and Void Functions, Why Functions?, Importing with from.

UNIT - II

Conditionals and Recursion - Modulus Operator, Boolean Expressions, Logical Operators, Conditional Execution, Alternative Execution, Chained Conditionals, Nested Conditionals, Recursion, Stack Diagrams for Recursive Functions, Infinite Recursion, Keyboard Input. **Fruitful Functions** - Return Values, Incremental Development, Composition, Boolean Functions, More Recursion, Leap of Faith, One More Example, Checking Types. **Iteration** - Multiple Assignment, Updating Variables, The while Statement, break, Square Roots, Algorithms, Debugging. **Strings** - A String Is a Sequence, len, Traversal with a for Loop, String Slices, Strings Are Immutable, Searching, Looping and Counting, String Methods, The in Operator, String Comparison.

UNIT - III

Lists - A List Is a Sequence, Lists Are Mutable, Traversing a List, List Operations, List Slices, List Methods, Map, Filter, and Reduce, Deleting Elements, Lists and Strings, Objects and Values, Aliasing, List Arguments. **Dictionaries** - Dictionary as a Set of Counters, Looping and Dictionaries, Reverse Lookup, Dictionaries and Lists, Memos, Global Variables, Long Integers. **Tuples** - Tuples Are Immutable, Tuple Assignment, Tuples as Return Values, Variable-Length Argument Tuples, Lists and Tuples, Dictionaries and Tuples, Comparing Tuples, Sequences of Sequences.

UNIT - IV

Files – Persistence, Reading and Writing, Format Operator, Filenames and Paths, Catching Exceptions, Databases, Pickling, Pipes, Writing Modules. **Classes and Objects** - User-Defined Types, Attributes, Rectangles, Instances as Return Values, Objects Are Mutable, Copying. **Classes and Functions** – Time, Pure Functions, Modifiers, Prototyping Versus Planning. **Classes and Methods** - Object-Oriented Features, Printing Objects, Another Example, A More

Complicated Example, Theinit Method, The str Method Operator Overloading, Type-Based Dispatch, Polymorphism, Debugging, Interface and Implementation. **Inheritance** - Card Objects, Class Attributes, Comparing Cards, Decks, Printing the Deck. Add, Remove, Shuffle, and Sort, Inheritance, Class Diagrams, Debugging, Data Encapsulation.

Text Book:

1. Allen B. Downey, Think Python, Shroff Publishers, O'Reilly.

Reference Books:

1. Charles Dierbach, Introduction to Computer Science using Python, Wiley.
2. Laura Cassell & Alan Gauld, Python Projects, Wrox A WileyBrand.
3. Paul Gries, Jennifer Campbell, Jason Montojo, Practical Programming – An Introduction to Computer Science using Python, ShroffPublishers.

Practical List of Python

1. Write a Python program to convert the given temperature from Fahrenheit to Celsius and vice versa depending upon users choice.
2. Write a Python program that allows the user to enter any integer base and integer exponent, and displays the value of the base raised to that exponent.
3. Write a Python program to calculate total marks, percentage and grade of a student. Marks obtained in each of the three subjects are to be input by the user. Assign grades according to the following criteria:

   Grade A: Percentage >=80

   Grade B: Percentage>=70 and <80

   Grade C: Percentage>=60 and <70

   Grade D: Percentage>=40 and <60

   Grade E: Percentage<40)

4. Write a Python program to find the area of rectangle, square, circle and triangle by accepting suitable input parameters from user using user-defined function.
5. Write a Python program to swap two variables
6. Write a Python program to input any 10 numbers and calculate their average using user defined function?
7. Write a Python Program to Check if a Number is Positive, Negative or 0
8. Write a Python Program to Check if a Number is Odd or Even
9. Write a Python program to find the largest number among the three input numbers
10. Write a Python Program to Display the multiplication Table
11. Write a Python program to print current date and time. In addition to this, print each component of date(i.e.year,month,day) and time (i.e.hours, minutes and microseconds) separately.
12. Write a Python program to calculate the subtraction of two compatible matrices ?

13. Write a Python program to print first 10 prime numbers.
14. Write a Python Program to Check Whether a String is Palindrome or Not
15. Write a Python Program to Convert Decimal to Binary, Octal and Hexadecimal
16. Write a Python Program to Sort Words in Alphabetic Order.
17. Write a Python Program to Find Sum of Natural Numbers Using Recursion
18. Write a Python Program to Print the Fibonacci sequence
19. Write a Python Program to Convert Kilometers to Miles
20. Write a Python Program to Find the Square Root

Paper – II

Course Code - **Course Name: Cloud Computing**

Learning Outcome

LO1	Given information on basics of Cloud Computing, students will be able to **understand** the different paradigms, also able to **define** fundamental terminologies of Cloud Computing.
LO2	Given information on architecture and deployment model, students will be able to **remember** structure and the use of Cloud management with its types.
LO3	Given information on various cloud service models students will be able to **differentiate** and illustrate its Virtualization.
LO4	Given information on service providers, students will be able to **describe** the cloud service Model and understand the importance of its service providers.

UNIT-I

Computing Paradigms: High-Performance Computing, Parallel Computing, Distributed Computing, Cluster Computing, Grid Computing, Cloud Computing, Bio computing, Mobile Computing, Quantum Computing, Optical Computing, Nano computing, Network Computing. **Cloud Computing Fundamentals**: Need for Cloud Computing, Defining Cloud Computing; Network Computing Cloud Computing as a Service, Cloud Computing as a Platform, Principles of Cloud computing, Essential Characteristics, Requirements for cloud services, Benefits and Drawbacks of cloud computing.

UNIT-II

Cloud Computing Architecture and Management: Cloud architecture, Anatomy of the Cloud, Network Connectivity in Cloud Computing, Cloud Applications, Managing the Cloud-Cloud Infrastructure and Cloud application, Migrating Application to Cloud, Phases of Cloud Migration, Approaches for Cloud Migration, **Cloud deployment model-** Characteristics, Types of Deployment -Private, Public, community and hybrid

UNIT-III

Cloud Service Models: Infrastructure as a Service, **IaaS-** Characteristics, Suitability, Pros and Cons, Summary of IaaS Providers, Platform as a Service **PaaS-** Characteristics, Suitability, Pros and Cons, Summary of PaaS Providers, Platform as a Service, Software as a Service, **SaaS** - Characteristics, Suitability, Pros and Cons, Summary of SaaS Providers, Platform as a Service, Other Cloud Service Models. **Virtualization:** Opportunities, Approaches to virtualization.

UNIT-IV

Cloud Service Providers: EMC, EMC IT, Captiva Cloud Toolkit, Google, Cloud Platform, Cloud Storage, Google Cloud Connect, Google Cloud Print, Google App Engine, Amazon Web Services, Amazon Elastic Compute Cloud, Amazon Simple Storage Service, Amazon Simple Queue, service, Microsoft, Windows Azure, Microsoft Assessment and Planning Toolkit, SharePoint, IBM, Cloud Models, IBM Smart Cloud, SAP Labs, SAPHANA Cloud Platform, Virtualization Services Provided by SAP, Sales force, Sales Cloud. **Service Cloud:** Knowledge as a Service, Rack space, VMware, Manjra soft, Aneka Platform.

Text Book:

1. Essentials of cloud Computing: K. Chandrasekhran, CRCpress,2014

Reference Book:

1. Cloud Computing: Principles and Paradigms by Rajkumar Buyya,James Broberg and Andrzej M. Goscinski, Wiley, 2011.
2. Cloud Computing: A Practical Approach, Anthony T.Velte, Toby J.Velte, Robert Elsenpeter, Tata McGraw Hill, 2011.
3. Cloud Computing: Implementation, Management and Security, John W. Rittinghouse, James F.Ransome, CRC Press, 2012.

Paper – III

Course Code **Course Name – Advance Java**

Learning Outcome

LO1	Given information on the use of connectivity (JDBC) and networking which helps for client server application, students will be able to create management applications practices emphasized for network based client server application.
LO2	Given information is used for creation of enterprise edition work with servlet's and session tracking mechanism; students will be able to develop the solution for human computer interaction.
LO3	Given information on event handling and Java Server Pages, students will able to design and create the web by using action tags with the help of JSP API
LO4	Given information on Extensions and Standard Tags library students will be able to Apply advance Tags in their web pages and able to design and develop the application by using technologies.

UNIT - I

Introducing Swing – JFC, The MVC Architecture, Applet, Window Panes, Important Classes of the javax.swing Package, Setting the Look and Feel of Components, An Applet with Swing Components. **Working with JDBC** - Introducing JDBC, Exploring JDBC Drivers, Exploring the Features of JDBC, Describing JDBC APIs, Exploring Major Classes and Interfaces, Exploring JDBC Processes with the java.sql Package, Working with Transactions. **Network Programming** - Networking Basics, Network Programming in Java Using the java.net Package, Establishing the two-way Communication between Server and Client, Retrieving a file at server, Learning the DatagramSocket and DatagramPacket Classes, Understanding the Content and Protocol Handlers.

UNIT - II

RMI, Naming Service, Serialization, and Internationalization - RMI Architecture, RMI Registry, Dynamic Code Loading in RMI, RMI API, Creating a Distributed Application, using RMI, Naming Services, Directory and Naming Services, Overview of JNDI, Object Serialization, Internationalization, Java and Internationalization, Internationalizing Web Applications. **Introducing the Java EE Platform** - Enterprise Application Concepts, Introducing the Java EE 6 Platform, HTTP Protocol, Exploring Web Application, Introducing Web and Application Servers. **Working with Servlets** - Exploring the Features of Java Servlet, Exploring New Features in Servlet 3.0, Exploring the Servlet API, Explaining the Servlet Life

Cycle. Understanding Servlet Configuration, Creating a Sample Servlet, Creating a Servlet by using Annotation, Working with ServletConfig and ServletContext Objects, Working with the HttpServletRequest and HttpServletResponse Interfaces, Exploring Request Delegation and Request Scope, Describing a Session, Introducing Session Tracking, Exploring the Session Tracking Mechanisms, Using the Java Servlet API for Session Tracking.

UNIT - III

Introducing Event Handling and Filters - Introducing Events, Intoducing Event Handling, Working with the Types of Servlet Events, Introducing Filters, Exploring Filter API, Configuring a Filter, Creating a Web Application Using Filters, Using Initializing Parameter in Filters, Manipulating Responses, Discussing Issues in Using Threads with Filters. **Working with JavaServer Pages (JSP)** - Introducing JSP Technology, Exploring New Features of JSP 2.1, Listing Advantages of JSP over Java Servlet, Exploring the Architecture of a JSP Page, Describing the Life Cycle of a JSP Page, Working with JSP Basic Tags and Implicit Objects, Working with Action Tags in JSP, Exploring the JSP Unified EL, Using Functions with EL.

UNIT - IV

JSP Tag Extensions and Standard Tag Library - Exploring the Elements of Tag Extensions, Exploring the Tag Extension API, Working with Classic Tag Handlers, Working with Simple Tag Handlers, Working with JSP Fragments, Working with Tag Files, Introducing JSTL, Working with the Core Tag Library, Working with the XML Tag Library, Working with the Internationalization Tag Library, Working with the SQL Tag Library, Working with the Functions Tag Library. **Introducing Hibernate** - Introducing Hibernate, Exploring the Architecture of Hibernate, Downloading Hibernate, Exploring HQL, Understanding Hibernate O/R Mapping, Working with Hibernate. Implementing O/R Mapping withHibernate.

Text Book:

1. Prof. M. T. Savaliya, Advance java Technology, DreamtechPress.

Reference Books:

1. Dr. Ashwin Mehta, Sarika Shah, Advance Java for Students, ShroffPublishers.
2. Patrick Naughton & Herbert Schildt. The Complete Reference: Java 2, McGraw- Hill.
3. Joseph Weber, Using Java 2 Platform, Prentice Hall ofIndia.

4. Uttam K. Roy, Advance Java Programming, OxfordUniversity.
5. Kanika Lakhani, Advance Java Programming, KatsonBooks.

Practical List of Advance Java

1 Write a Java program to develop an applet that draws a circle. The dimension of the applet should be 500 x 300 pixels. The circle should be centered in the applet and have a radius of 100 pixels. Display your name centered in a circle.(using drawOval() method).

2. WriteaJavaprogramtodrawtenredcirclesinaverticalcolumninthecenterofthe applet.
3. Write a Java program to develop calculator-using Swing and add image on Button.
4. Write a Java program to find the IP address or computer name of local machine.
5. Write a Java program with class Greeting Client is a client program that connects to a server by using a socket and sends a greeting, and then waits for a response.
6. Write a Java program that implements a simple client/server application. The client sends data to a server the server receives the data, uses it to produce a result and then sends the result back to the client. The client displays the result on the console. For ex the data send from the client is a numbers and the result produce by the server is the addition of that number.
7. Write a Java program to create an application that displays a frame with a menu bar. When a user selects any menu or menu item, display that selection on a text area in the center of the frame.
8. Write RMI application where client supplies data to withdraw and server response with new account balance. Provide your custom security policy for this application.
9. Write a Java program to develop database application that allows user to Insert, Update, Delete values in a Table and manages appropriate exception handling when wrong values are enter.
10. WriteaJavaprogramtopresentasetofchoiceforusertoselectaproductand display the price of product.
11. Write a Java program to show validation of user using servlet.
12. Write a Java program to develop a simple servlet question answer application
13. Write a Java program to pass any URL string and display all 4 elements of URL string.
14. Write a Java program to trap all the events of mouse listener interface.

15. Write a Java program to show validation of user using JSP.
16. Write a Java program to display message on browser using JSP.
17. Write a Java program to connect with the google.com and retrieve the html code of default webpage.
18. Write a Java program to present a set of choices for a user to select stationary products and display the price of product after selection from the list.
19. Write a Java program to demonstrate typical editable table, describing employee details for a software company.
20. Write a Java program to trap all the events of key listener interface.
21. Write a Java program of calling one servlet by another servlet.
22. Write a Java program to develop a simple servlet calculator application.
23. Write a Java program to set scope of beans.
24. Write a Java program to create a JSP application that accepts registration details from the student and stores the details into the database table.
25. Write a Java program to develop a JSP application that authenticate user login as per the registration details. If login success then forward user to the index page otherwise show login failure message.
26. Write a Java program using split pane to demonstrate a screen divided into two parts contains a name of planets and another display the image of planet. When user selects the planet name from the left screen appropriate image of display in right screen.
27. Write a Java program to develop a web application to add items in the inventory using JSP.
28. Write a Java program to create a web Form, which processes servlet and demonstrates use of cookies and sessions.
29. Write a Java program to develop a simple JSP program for user login form with static and dynamic database.
30. Write a Java program to develop a JSP program to display the grade of a student by accepting the marks of five subjects.

Paper – III

Course Code **Course Name – React JS**

Learning Outcome

LO1	Given information on ECMS script student will be able to **understand** the basic concept of scripting language as well as able to **use** functions in the program
LO2	Given information on React JS basic concepts students will be able to remember the directory structure and nested elements of JSX
LO3	Given information on props & state, components and routing student will be able to **create** components and **apply** them in their program.
LO4	Given information and form & user input and hooks students will be able **design** Form, **create** and **apply** custom hooks in their application.

UNIT – I

Introduction of ECMS script: Introduction var, let & const, Arrow function, setTimeout & clearTimeout method, setInterval & clearInterval methods, map function, filter function, join function, callback function, spread operator, reduce function, sort function, sort function, classes, properties and method, import and export

UNIT – II

Introduction of React JS: About ReactJs, server requirements, node Js & NPM, Webpack, Babel & JSX, Directory Structure; **Introduction of JSX**- Basic Concept, nested elements in JSX, JSX attributes, JSX Comments

UNIT – III

Props & States: Introduction, default props, props types, basic states, common Antipattern, SetState, State, Events & Managed controls: **Components**: Class components, functional components; **Routing**: Installation of React Routing, Create components, Add a route

UNIT – IV

Forms and User Input: controlled components, uncontrolled components; **Hooks**: UseState & State updating, multiple states, rules of Hooks, useEffect, custom Hook

Reference Books

1. Learning React: Modern Patterns for Developing React Apps 2nd Edition by Alex Banks & Eve Porcello

2. React Key Concepts: Consolidate your knowledge of React's core features by Maximilian Schwarzmuller
3. The Road to React: Your journey to master plain yet pragmatic React.js by Robin Wieruch
4. React and React Native: Build cross-platform JavaScript applications with native power for the web, desktop, and mobile, 4th Edition 4th ed. Edition by Adam Boduch, Roy Derks and Mikhail Sakhnjuk
5. React.js Complete Guide To Server-Side Rendering (Front-end development) by Gerard van der Put
6. Learn React Hooks: Build and refactor modern React.js applications using Hooks by Daniel Bugl

Practical List React JS

1. Write a program to Build Search filter in React - React code to build a simple search filter functionality to display a filtered list based on the search query entered by the user.
2. Write a program to create Simple counter exercise - Creating a simple counter using React which increments or decrements count dynamically on-screen as the user clicks on the button. This exercise requires knowledge of fundamental React concepts such as State, Component, etc.
3. Write a program to Display a list in React - React code to print each item from the list on the page using Array.map() function to display each item on the page.
4. Write a program to Build Accordion in React - Creating an accordion that toggles text content on click of the accordion header using React State and conditional rendering.
5. Write a program to create Image Slider using React JS - React exercise to create an image slide, where users can view multiple images with next/previous buttons. Additionally, there is also an option to select an image from any index of the list through a click-on option circle.
6. Write a program to Create a Checklist in React - React code to display a checklist with multiple options that can select and the selected options are dynamically displayed on the screen. React State is used to keep track of checked options and onChange() Event handler is triggered to alter the state whenever an option is checked or unchecked.

7. Write a program to create Simple Login form in React - React code for simple login form where the user login by entering their username and password. The form inputs are validated to check if correct information is entered and the error messages are the validation fails. The login form is hidden and the "Welcome, ${name}" message is shown when the user login is successful.
8. Write a program to Print data from REST API - React code to collect data from rest API using fetch() in JavaScript combined with useEffect() to load the content on page render.
9. Write a program to create a Multi-Page navigation using React Router - React code to develop a multipage application with navigation for Home, About and Blog pages. The route-based component rendering is implemented using the "react-dom" npm package to allow users to navigate to different pages and render the component with respect to the route.
10. Write a program to create Context API in React Components - Context allows values to be passed from multiple levels of child components without using props. Thus context can be used as an alternative to Redux in some of the cases.
11. Write a program to Create simple Calculator: Create Simple calculator in React
12. Write a program to Create Image Search: Create image search using ReactJs and Unsplash Developer API.
13. Write a program to create Youtube Search: Youtube Video Search in React
14. Write a program to Create Todo List: Create Todo List in React.
15. Write a program to Integrate Bootstrap framework with React and Create Simple Registeration Form
16. Write a program to Integrate Material UI framework with React and Create Simple Registeration Form
17. Create React Fully Responsive Website: Build a fully responsive website in ReactJS, viewable in desktop, mobile, tablet.
18. Create Static Website: Create a static website by creating reusable components like button, cards, container, icons
19. Create Weather App: Create Weather App by using free OpenWeather
20. Create React Password Generator: Generate strong password using ReactJS.

Semester – II

Paper – 1

Course Code – **Course Name – ASP.Net**

Learning Outcome

LO1	Given information on **development** and **deployment** cycles of enterprise applications so that Students will be able to understand the ASP.NET frame work to and enhance the web page with the combination of advance web designing tools(CSS3, HTML5)build distributed enterprise application
LO2	Given information to **understand** server controls like secure protocols and also **examine the** entered data on the web page which helps to handle Master page with cookies.
LO3	Given information to **access** the backend (database)with suitable connectivity controls and **deploy** a secure client server in real life application with customized web page like secure web access methods
LO4	Given information will **deploy** the web application by application interface control and WCF services so that Students will be able to **create** dynamic web applications using a combination of client-side (JavaScript, HTML, XML, WML) and server-side technologies (ASP.NET, ADO.NET).

UNIT – I

An introduction to ASP.NET programming: An introduction to web applications, An introduction to ASP.NET development. **How to develop a one-page web application:** How to work with ASP.NET web sites, How to use Visual Studio to build a web form, How to add validation controls to a form, How to add C# code to a form, How to test a web application.

How to use HTML5 and CSS3 with ASP.NET applications: The Future Value application with CSS formatting, The HTML and CSS skills that you need. **How to develop a multi-page web application**: How to work with multi-page web sites, How to use session state. **How to test and debug ASP.NET applications**: How to test an ASP.NET web site, How to use the debugger, How to use the trace feature.

UNIT –II

How to use the standard server controls: How to use the common server controls, How to use the button controls, How to use the list controls. **How to use the validation controls**: Introduction to the validation controls, How to use the validators, Validation techniques. **How to work with state, cookies, and URL encoding**: How to use view state, How to use session state. How to use application state and caching, How to use cookies and URL encoding. **How to use master pages**: How to create master pages, How to create and develop content pages, How to customize content pages. **How to use themes**: An introduction to themes, How to work with themes and skins **How to use site navigation and ASP.NET routing**: How to use the navigation controls, How to use ASP.NET routing, How to use the navigation controls with ASP.NET routing.

UNIT – III

An Introduction to database programming: An introducion to relational databases, An introduction to ADO.NET 4.5, How to use the DataList control, How to use data binding, How to customize the GridView control, How to use the DetailsView control , How to use the FormView control. **How to use object data sources with ADO.NET**: An introduction to object data sources, How to create a data access class, A Category Maintenance application . **How to secure a web site**: An introduction to SSL, How to use a secure connection. **How to authenticate and authorize users**: An introduction to authentication, How to set up authentication and authorization, How to use the login controls. **How to use email, custom error pages, and back-button control**. How to send email, How to use custom error handling, How to handle the back-button problem.

UNIT – IV

How to configure and deploy ASP.NET applications: How to use the Web Site Administration Tool, An introduction to deployment, How to use one-click deployment, How to create and use a Setup program. **How to use ASP.NET Ajax**: An introduction to Ajax, An introduction to ASP.NET Ajax, How to use the ASP.NET Ajax server controls, An application that uses ASP.NET Ajax. **How to create and use WCF and Web API services**: An introduction to web services, How to create a WCF service, How to create a web site that consumes a WCF service, How to create a Web API service, How to create a web site that consumes a Web API service. **An introduction to ASP.NET MVC**: An introduction to MVC, An introduction to ASP.NET MVC, How to work with views, How to work with controls and postbacks.

Text Book:

1. Mary Delamater & Anne Boehm, murach's ASP.Net Web Programming with C#, Shroff Publishers.

Reference Books:

1. ASP.Net Black Book, Kogent Learning Solutions Inc, Dreamtech Press.
2. Jason Gaylord, Christian Wenz, Pranav Rastogi, Todd Miranda, Scott Hanselman, Professional ASP.Net in C# & VB, Wrox A Wiley Brand.
3. ASP.Net with C#, Kogent Learning Solutions Inc, Dreamtech Press.

Practical List of ASP.Net

1. Create a page in ASP.NET using VB.NET or C# to display the following Web Controls:
   - A button with text —click me!. The button control must be in the center of the form.
   - A label with a text hello
   - A checkbox. The form name must be Web Controls.
2. Create a page in ASP.NET using VB.NET or C# containing the following controls:
   - A ListBox
   - A Button
   - An Image
   - A Label

The listbox is used to list items available in a store. When the user clicks on an item in the listbox, its image is displayed in the image control. When the user clicks the button, the cost of the selected item is displayed in the control.

3. Create a page in ASP.NET using VB.NET or C# that take a student name from the user, add that name in list-box control. And delete the chosen name from the list-box.
4. Create a page in ASP.NET using VB.NET or C# for book sales. Enter the quantity, title and price of the book. Calculate the extended price, discount (15%) and after discount, the actual price of the book. Show the summery of book sales. (Like total no of books, total discount given, total discounted amount and average discount.) You will need command buttons- calculate, clear sale.
5. Create a page in ASP.NET using VB.NET or C# using HTML Server controls that take user name, address, and city, state and country name from the user and display it.
6. Create a page in ASP.NET using VB.NET or C# to get a user input such as the boiling point of water and test it to the appropriate value using Compare Validator
7. Create a page in ASP.NET using VB.NET or C# that uses a textbox for a user input name and validate it for RequiredField Validation.
8. Create a page in ASP.NET using VB.NET or C# that gets user input such as the user name, mode of payment, appropriate credit card. After the user enters the appropriate values the Validation button must validates the values entered.
9. Create a page in ASP.NET using VB.NET or C# to declare one TextBox control, one Button control, one Label control, and one RegularExpressionValidator control in an .aspx file. The submit() function checks if the page is valid. If it is valid, it returns "The page is valid!" in the Label control. If it is not Valid, it returns "The page is not valid!" in the Label control. If validation fails, the text "The zip code must be 5 numeric digits!" will be displayed in the RegularExpressionValidator control.
10. Create a page in ASP.NET using VB.NET or C# using HTML Server controls that convert given currency into another selected currency. For that you need a dropdown-list.
11. Create a page in ASP.NET using VB.NET or C# to the database with ADO.NET for Inserting Data.
12. Create a page in ASP.NET using VB.NET or C# to the database with ADO.NET for Updating Data.

13. Create a page in ASP.NET using VB.NET or C# to the database with ADO.NET for Deleting Data
14. Create a page in ASP.NET using VB.NET or C# to the database with ADO.NET for Search Data.
15. Create a page in ASP.NET using VB.NET or C# to create a proxy.
16. Create a page in ASP.NET using VB.NET or C# that has a form taking the user"s name as input. Store this name in a permanent cookie & whenever the page is opened again, then value of the name field should be attached with the cookie"s content
17. Create a page in ASP.NET using VB.NET or C# to run video
18. Create a page in ASP.NET using VB.NET or C# to delete all cookies of your web site that has created on the client's computer.
19. Create a page in ASP.NET using VB.NET or C# to the database with ADO.NET for Inserting Data.
20. Create a page in ASP.NET using VB.NET or C# to the database with ADO.NET for Updating Data.

Paper – II

Course Code – **Course Name – Information Security & Cyber Law**

Learning Outcome

LO1	Given information on information security and threats students will be able to **understand** structure, mechanics and evolution of various crime threats and able to **remember** the security mechanism.
LO2	Given information on various security mechanism, students will be able to **define** various security tools used to protect the data
LO3	Given information on IT Act 2000 students will be able to **illustrate** different terminologies used in IT Act 2000
LO4	Given information on various tools used in security, students will be able to **recognize** which tool is best suited in field.

UNIT - I

- Information Security : Overview, need for information security, objectives of Information security. - Global information systems and their evolution, basics of information systems, role of the Internet and the World Wide Web. - Understanding about the threats to information systems security Building blocks of InfoSec, How Organizations manage security of their information systems Information security risk analysis fundamentals. - Importance of physical security and biometrics controls for protecting information systems assets. - Security considerations for the mobile work force. - Network security perspectives, networking and digital communications (overview only), security of wireless networks.

UNIT - II

- Cryptographic techniques and Encryption, Intrusion Detection Systems and Firewalls,security of virtual private networks. - Security issues in application development with emphasis on integration of enterprise applications, database security, operating security and security of electronic mailing systems. - Security models and frameworks and standards through introduction to the ISO 27001, SSE-CMM (systems security engineering – capability maturity model), COBIT (Control Objectives for Information and related technologies) and the SarbanesOxley Act (SOX) and SAS 70 (statement on auditing standards). - Privacy Fundamentals, business practice's impact on data privacy, technological impact on data privacy, privacy issues in web services and applications based on web services. - Information security best practices – staffing, audits, and disaster recovery planning and business continuity planning and asset management. - Ethical issues and intellectual property concerns for information security professionals copy right, data protection etc. matters.

UNIT – III

- Introduction of IT Act 2000, main features of IT Act 2000, Digital Signature. - Access Control : Operating system Access Controls, Group and Roles, Access Control lists, Unix Operating System Security, Windows NT, Capabilities, Added Features in Windows 2000, Granularity, Sandboxing and Proof-carrying code,Hardware protection, Other technical Attacks. - Cryptography & PKI : Symmetric Cryptography, Asymmetric Cryptography, Keys, Hash Functions, Digital Signatures. - Distributed Systems - Concurrency, Fault Tolerance and Fault Recovery, Naming.

UNIT – IV

- Multilevel and Multilateral Security : Multilevel Security, Multilateral Security. - Electronic Banking –Banking and Bookkeeping. - Monitoring Systems –Introduction, Alarms, Prepayment Masters. - Biometrics : Physiological biometric techniques, behavioral biometric techniques, - New biometric techniques, biometric systems. - Incident Response : Incident Response, Prerequistes to planning an IRT. - Network attack and Defence : Most Common Attacks, Scripts Kiddies and Packaged Defence. - Management Issues : Organisational Issues, - Protecting E-commerce Systems – Introduction - Hacking – Introduction

Books Recommended

1. Information Systems Security Management - Nina S. Godbole (Wiley India Pvt. Ltd)
2. Security Engineering - Ross Anderson
3. Information Security Management Handbook - Harold Tipton & Micki Krause (Auerbach Publications)
4. Network Security Essentials: Applications and Standards - W. Stallings (Pearson Education)
5. eSecurity and You - Sandeep Oberoi (Tata McGraw-Hill)
6. Cyber Laws – Singh Yatindra
7. Cyber Crime – Bansal S K
8. Cyber law , E-commerce & M-Commerce – Ahmand Tabrez
9. Handbook of Cyber and E-commerce laws Bakshi P M & Suri R K
10. Management Fundamentals and Information Systems Dr Sushila Madan (Taxmann's)

Paper – III

Course Code – **Course Name – Practical Android Programming**

Learning Outcome

1.O1	Given information on basics interface and architecture student will able to **develop** and **grasp** of the Android OS architecture (using various android views and view groups).

	Given information on designing different themes for android application which help
LO2	Students will able to **Understand** the handling the data by using external devices and also for the networking communicaton application.
	Given information will help the students to **understand** the geographical locations
LO3	on the maps with the help of geo-coding and reverse geo-coding as well as application will enrich with use of graphics and animation.
LO4	Given information will help Students to **Familiarize** with Android development by selecting tools for including device emulator, profiling tools and IDE as well as **Identity, analyze** data storage, retrieval, user preferences, files and content providers

UNIT - I

Getting an Overview of Android Introducing Android - Listing the Version History of Android Platform, Discussing Android APIs, Describing the Android Architecture Application Framework, Exploring the Features of Android, Discussing about Android Applications, The Application Components, The Manifest File, The Command-Line Tools, Developing and Executing the First Android Application, Using Eclipse IDE to Create an Application, Running Your Application, Exploring the Application, Using Command-Line Tools. **Using Activities, Fragments and Intents in Android** - Working with Activities, Creating an Activity, Starting an Activity, Managing the Lifecycle of an Activity, Applying Themes and Styles to an Activity, Displaying a Dialog in the Activity, Hiding the Title of the Activity, Using Intents, Exploring Intent Objects, Exploring Intent Resolution, Exploring Intent Filters, Resolving Intent Filter Collision, Linking the Activities Using Intent, Fragments, Fragment Implementation, Finding Fragments, Adding, Removing, and Replacing Fragments, Finding Activity Using Fragment, Using the Intent Object to Invoke Built-in Application. **Working with the User Interface Using Views and ViewGroups** - Working with View Groups, The LinearLayout Layout, The RelativeLayout Layout, The ScrollView Layout, The TableLayout Layout, The FrameLayout Layout, The TabLayout Using the Action Bar, Working with Views, Using the TextView, Using the EditText View, Using the Button View, Using the RadioButton View, Using the CheckBox View, Using the ImageButton View, Using the ToggleButton View, Using the RatingBar View, Binding Data with the AdapterView Class, Using the ListView Class, Spinner, Using the Gallery View, Designing the AutoTextCompleteView, Implementing Screen Orientation, Anchoring the Views of the Current Activity, Customizing the Size and

Position of the Views. Designing the Views Programmatically, Handling UI Events, Handling User Interaction with Activities, Handling User Interaction with the Views, Specialized Fragments, ListFragment, DialogFragment, PreferenceFragment. Creating Menus The Options Menu The Context Menu The SubMenus.

UNIT - II

Handling Pictures and Menus with Views - Working with Image Views, Displaying Images in the Gallery View, Displaying Images in the Grid View, Using the ImageSwitcher View, Designing Context Menu for Image View, Using the AnalogClock and DigitalClock Views, Embedding Web Browser in an Activity, Notifying the User Creating the Toast Notification, Creating the Status Bar Notification, Creating the Dialog Notification. **Storing the Data Persistently** - Introducing the Data Storage Options, Using Preferences, Using the Internal Storage Exploring the Methods Used for Internal Storage, Developing an Application to Save User Data Persistently in File, Using the External Storage Exploring the Methods Used for External Storage, Developing Application to Save File in SD Card, Using the SQLite Database Creating the Database Helper Class, Creating the Layout and Main Activity Class, Creating the Layout and Activity for the Insert Operation, Creating the Layout and Activity to Search a Record, Creating the Activity Class to Fetch All Records, Creating the Layout and Activity for the Update Operation, Creating the Layout and Activity for the Delete Operation, Executing the Database Operations, Working with Content Providers, Exploring the android.provider Package, Creating User-Defined Content Provider, Consuming User- Defined Content Provider. **Emailing and Networking in Android** - Building an Application to Send Email, Networking in Android, Getting an Overview of Networking Fundamentals, Checking Network Availability, Accessing Web Services UsingHTTP Post, Accessing Web Services Using the GET Method, Working with Binary Data and Text Files, Consuming JSON Services, Sockets Programming.

UNIT - III

Working with Location Services and Maps - Working with Google Maps, Exploring Google Maps External Library, Creating an Application Using Google Maps Android API, Disabling the Zoom Control Button, Changing the Map Type, Displaying the Specific Location and Adding Markers, Handling Map Gestures Interaction, Getting the Current Location of a User, Working with Geocoding and Reverse Geocoding. **Working with Graphics and Animation**

- Working with Graphics, Drawing Graphics to Canvas, Using the Drawable Object, Referencing an Image File, Defining Drawable in XML, Using the Shape Drawable Object, Working with the Nine Patch Drawable Graphics, Understanding the Concept of Hardware Acceleration, Working with Animations, The Property Animation, View Animation Drawable Animation. Audio, Video and Camera - Role of Media Playback Using Media Player Media Formats Supported by Media Player, Preparing Audio for Playback, Preparing Video for Playback, Creating Application to Play Audio and Video Using MediaPlayer, Recording and Playing Sound, Use of Media Store Audio Recording Application, Creating a Sound Pool Using Camera for Taking Pictures, Creating Video RecordingApplication.

UNIT - IV

Threads and Services - Introducing Threads Worker Threads Using AsyncTask, Introducing Services Exploring Services Essentials, Understanding the Lifecycle of a Service, Exploring the Service Class, Introducing the Service Class, Creating a Bound Service. **Bluetooth, NFC and Wi-Fi** - Working with Bluetooth Exploring the Android Bluetooth APIs, Permissions Required to Access Bluetooth, Setting Up the Bluetooth for an Application, Identifying the Bluetooth-Enabled Devices, Querying the Paired Devices, Discovering Devices Creating an Application Using Bluetooth Functionality, Connecting the Devices Using Bluetooth for Data Transfer, Connecting as a Server Connecting as a Client Working with Bluetooth Low Energy, Working with NFC, Exploring the Basics of NFC, Developing an Application Using NFC, Working with Wi-Fi, Exploring the Wi-Fi APIs, Creating an Application Using Wi-Fi. **Telephony and SMS** - Handling Telephony Displaying Phone Information Application Receiving Phone Calls Application, Making Outgoing Phone Calls Application, Handling SMS Sending SMS Using SmsManager, Sending SMS Using Intent, Receiving SMS Using the BroadcastReceiver Object, Role of Default SMS Providers. Hardware Sensors - Introducing Sensors Exploring the Sensor Framework, Managing Various Sensor Configurations, Understanding the Sensor Coordinate System.

Text Book:

1. Rradeep Kothari, Android Application Development - Black Book, Dreamtech Press.

Reference Books:

2. Prasanna Kumar Dixit, Android, Vikas Publishing.
3. Dawn Griffiths & David Griffiths, Head First Android Development, Shroff Publishers.
4. Ed Burnette, Hello Android, Shroff Publishers.
5. Jerome DiMarzio, Android – A Programmer's Guide, McGraw-Hill.
6. Dave MacLean, Satya Komatineni, Grant Allen, Pro Android 5, Apress.
7. Reto Meier, Professional Android Application Development, Wiley.

Practical List of Android Programming

1. Create —Hello Worldl android application. That will display —Hello Worldl in the middle of the screen in the red color with white background.
2. Write an android application to understand Activity, Intenta. Create sample application with login module. (Check username and password) and on successful login, go to next screen. And on failing login, alert user using Toast. Also pass username to next screen.
3. Create an android application that will change color of the screen and change the font size of text view using xml.
4. Create login android application where you will have to validate EmailID (UserName). Till the username and password is not validated, login button should remain disabled.
5. Create and login android application as above. On successful login, open browser with any URL.
6. Create an android application that will pass some number to the next screen, and on the next screen that number of items should be display in the list.
7. Create an android application that will change color of the screen, based on selected options from the menu.
8. Create an android application that will display toast (Message) on specific interval of time.
9. Create a android background application that will open activity on specific time.
10. Create an android application that will have spinner with list of animation names. On selecting animation name, that animation should affect on the images displayed below.
11. Create an android UI such that, one screen have list of all the types of cars, and on selecting of any car name, next screen should show Car details like : name, launched date, company name, images(using gallery) if available, show different colors in which it is available.

12. Write an android application to read phonebook contacts using content providers and display in list.
13. Write an android application to read messages from the mobile and display it on the screen.
14. Create an android application to call specific entered number by user in the EditText
15. Create an android application that will create database with table of User credential.
16. Create an android application to read file from asset folder and copy it in memory card.
17. Create an android application that will play a media file from the memory card.
18. Create an android application to make Insert, update, Delete and retrieve operation on the database.
19. Create an android application to read file from the sdcard and display that file content to the screen.
20. Create an android application to draw line on the screen as user drag his finger.
21. Create an android application to send message between two emulators.
22. Create an android application to take picture using native application.
23. Create an android application to pick up any image from the native application gallery and display it on the screen.
24. Create an android application to open any URL inside the application and clicking on any link from that URI should not open Native browser but that URL should open the same screen.
25. Create an android application that will create database with table of User credential.

Paper – III

Course Code – **Course Name – Angular JS**

Learning Outcome

LO1	Given information on basics of Angular JS student will be able to **design** the page and **apply** in real time applications
LO2	Given information on directives, controllers and modules student will be able to **Create** and **Use** while design their web page or web application

LO3	Given information on Forms and Dependency, students will be able to **design** Form with all validations and be able to **create** services.
LO4	Given information on application building student will be able to **create** single page application with animations

UNIT - I

Angular JS Basics - What is Angular JS? Why Angular JS? Why MVC matters, MVC-The Angular JS way Features of Angular JS, Model-View-Controller, My First Angular JS app.

Angular Expressions - All about Angular Expressions, How to use expressions, Angular vs JavaScript

Filters - Built-In Filters. Using Angular JS Filters, Creating Custom Filters

UNIT - II

Directives - Introduction to Directives, Directive Lifecycle, Binding controls to data, Matching directives, Using Angular JS built-in directives, Creating a custom directive

Controllers - Role of a Controller, Controllers & Modules, Attaching Properties and functions to scope, Nested Controllers, Using Filters in Controllers, Controllers in External Files

Angular JS Modules - Introduction to Angular JS Modules, Bootstrapping Angular JS

UNIT - III

Angular JS Forms - Working with Angular Forms, Model Binding, Forms Events, Updating Models with a Twist, Form Controller, Validating Angular Forms, Serror object

Scope - What is scope, Soope Lifecycle, Scope Inheritance, Scope & Controllers, Root scope, Scope Broadcasting, Two-way data binding, Scope Inheritance, Scope & Directives, $apply and $watch, Scope Events

Dependency Injection & Services - What is Dependency Injection, Creating Services. Factory, Service & Provider. Using Dependency Injection. What are services, Using Angular JS built in services

UNIT - IV

Single Page Application (SPA) - What is SPA, Pros and Cons of SPA, Passing Parameters, Changing location, Installing the ng Route module, Configure routes, Resolving promises, creating a Single Page Apps

Angular JS Animation- Animate Module, CSS Transforms, CSS Transitions, Applying Animations

Reference Books

1. The Complete Guide to Angular Paperback – 6 February 2018 by Felipe Coury, Ari Lerner and Carlos Taborda
2. Angular in Action Paperback – Import, 2 April 2018 by Jeremy Wilken
3. Angular: From Theory To Practice: Build the web applications of tomorrow using the Angular web framework from Google. Kindle Edition by Asim Hussain
4. Angular 6 for Enterprise-Ready Web Applications: Deliver production-ready and cloud-scale Angular web apps 1st Edition, Kindle Edition by Doguhan Uluca
5. Angular: Up and Running: Learning Angular, Step by Step 1st Edition, Kindle Edition by Shyam Seshadri
6. Pro AngularJS (Expert's Voice in Web Development) Paperback – 7 April 2014 by Adam Freeman
7. Angular Development with TypeScript Paperback – 17 December 2018 by Yakov Fain and Anton Moiseev

Practical List of Angular JS

1. Design Order Form with a total price updated in real time, which contains name of five products and their prices. Create a bill amount for all the products, calculate GST on the billing amount, and display total amount.
2. Implement Angular JS to create your Resume.

3. Use Practical No.01 and initialize prices to 0 (zero) when form loads. (Use module, controller & directive)
4. Design a webpage which takes one number as an input and generate its factorial number (use module, controller).
5. Design a webpage. which takes inputs product name, product quantity and price. Generate table of entered values. When user clicks on table column title, it should sort that column values. (Use filter, array).
6. Design a webpage which display product name and product price using AngularJS $http Service from database Display the content in tabular format.
7. Write a program to create notepad application using Angular JS
8. Write a program in Angular JS to create Navigation Menu that highlights the selected entry.
9. Write a program in Angular JS to create a simple inline editor - clicking a paragraph will show a tooltip with a text field.
10. Write a program in Angular JS to design an order form with a total price updated in real time, using filters.
11. Write a program in Angular JS to filter a list of items by typing into a text field
12. Write a program in Angular JS to change name using JS Controller
13. Write a program in AngularJS to enter the text in the input field. & Angular JS will display an error message if the entered text is invalid.
14. Write a program in Angular JS to hide a Div by adding checkbox.
15. Write a program in Angular JS to print "Hello World"
16. Write a program in Angular JS to design cost calculator.
17. Write a program in Angular JS to change the color of input box by changing its value.

DIRECTION NO.42 OF 2023

THE ADMISSIONS AND EXAMINATIONS OF STUDENTS LEADING TO THE AWARD OF THE DEGREE OF MASTER OF ARTS (CHOICE BASED CREDIT SYSTEM) (SEMESTER PATTERN), DIRECTION 2023.

Whereas, the Maharashtra Public Universities Act, 2016 (VI of 2017) (hereinafter the Act VI of 2017) has come in to force in the State of Maharashtra, with effect from 1st March 2017, repealing the Maharashtra Universities Act, 1994;

AND

Whereas, the Rashtrasant Tukadoji Maharaj Nagpur University (hereinafter the "University"), hitherto governed by the Maharashtra Universities Act, 1994, is now being governed by the Act (VI of 2017);

AND

Whereas, under section 34 (2) of the Act, VI of 2017, the university shall have only four faculties specified in said section;

AND

Whereas, the composition of each faculty in the university is to be such as may be prescribed by the university and the university has issued Direction No.27 of 2022 prescribing the composition of each faculty in the university;

AND

Whereas, the university has issued Direction No.10 of 2019 prescribing certain common conditions for all the undergraduate and post graduate programmes/courses in the university;

AND

Whereas, the University Grants Commission, New Delhi vide letter No.D.ONo.F-1-1/2015(CM) dated 8th January 2015 recommended reforms pertaining to the introduction of Choice Based Credit System at the earliest from the academic session 2015-16 to provide option to students and also seamless mobility across the institutions;

AND

Whereas, New National Education Policy has been introduced by the Government and time and again UGC and State has asked the Universities to modify the programmes in the University in order to give effect to the provisions of New National Education Policy;

AND

Whereas, the Board of Studies in different subjects of Arts in their meetings have made certain changes in the syllabus and credits and in particular have decided to have Post Graduate programe in Arts with 80 Credits and to have skill component in it in order to implement the provisions of New National Education Policy 2020;

AND

Whereas, Direction No. 1 of 2023 has lapsed by virtue of the provisions of the proviso to section 12(8) of the Act with the expiry of the period of six months as the same could not be converted in to the necessary Ordinance necessitating the issuance of a fresh Direction, incorporating the provisions of the lapsed Direction No. 1 of 2023;

Now, therefore, I Dr. **Subhash R. Chaudhari**, Vice-Chancellor, Rashtrasant Tukadoji Maharaj University Nagpur, in exercise of the powers conferred upon me under provision of section 12(8) of the Maharashtra Public Universities Act, 2016, do hereby issue the following Direction:-

1. This Direction shall be called "**THE ADMISSIONS AND EXAMINATIONS OF STUDENTS LEADING TO THE AWARD OF THE DEGREE OF MASTER OF ARTS (CHOICE BASED CREDIT SYSTEM) (SEMESTER PATTERN), DIRECTION 2023.**"

2. This Direction shall come into force from the date of its issuance;

3. In this Direction unless the context otherwise requires; -

a. "ATKT" means "Allowed to Keep Term" in the higher semester, as per the rules herein.

b. **"Board of Studies"** means Board of studies of the University in the discipline/subjects concerned.

c. **"Course"** means a theory or practical (or the combination of theory and practical) subject, prescribed for any semester and carrying maximum and minimum passing marks, which a student, admitted to the programme of the **Master of Arts (Choice Based Credit System) (Semester Pattern)** has to study in order to become eligible for the award of the Degree under this Direction.

d. **"Credit"** means the unit by which the course work is measured. It is measured in terms of weekly class hours assigned to a Course.

e. **"Credit Point" (CP):** It is the value obtained by multiplying the Grade Point by the Credit i.e. No. of Credits assigned for the course x Grade Points secured for that course.

f. **"Cumulative Grade Point Average (CGPA)"**: CGPA refers to the Cumulative Grade Point Average weighted across all the semesters. It is obtained by dividing total number of credit points in all the semesters by the total number of credits in all the semesters.

g. **"Degree"** means the Degree of **Master of Arts (Choice Based Credit System) (Semester Pattern)** which is to be awarded to a student admitted to the programme governed by this Direction on successful completion of the programme.

h. **"Grade Letter"**: It is an index to indicate the performance of a student in a particular course/ Paper. It is the transformation of actual marks secured by a student in a course/paper. It is indicated by a Grade letter O,A,B,C,D,E and F. There is a range of marks for each Grade.

i. **"Grade Point"** : Grade Point is the weightage allotted to each grade letter depending on the marks awarded in a course/paper.

j. **"Programme"** means the academic progrogramme consisting of four semesters, each semester having one or more than one course (subject), leading to the award of the degree of **Master of Arts (Choice Based Credit System) (Semester Pattern)**

k. **"Student"** means a student admitted to the **Master of Arts (Choice Based Credit System) (Semester Pattern)** programme under this Direction.

l. **Semester Grade Point Average (SGPA):** SGPA indicates the performance of a student in a given Semester. It is based on the total credit points earned by the student in all the courses and the total number of credits assigned to the courses/papers in a Semester.

k."**University**": means Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur

4. **Scope:** This Direction shall govern the Master of Arts programme in the following subjects:
History, economics, Political Science, Sociology Philosophy, Psychology, Geography, Home Economics, Women's Studies & Development, Dr. Ambedkar Thought, Public Administration, Buddhist Studies, Ancient Indian History Culture & Archaeology, Gandhian Thought, Travel & Tourism, Rashtrasant Tukadoji Maharaj Thought, English, Marathi, Hindi, Urdu, Sanskrit, Pali & Prakrit Arabic Persian, Music, Linguistics and other Indian languages.

5. The duration of the M.A. Programme shall be of two academic years consisting of four semesters with the university examinations at the end of each semester namely,
   a) M.A.Semester I examination.
   b) M.A.Semester II examination.
   c) M.A.Semester III examination.
   d) M.A.Semester IV examination.

6. The theory examination for Semesters-I, II, III and IV shall be conducted by the University and shall be held separately at the end of each semester at such places and dates as may be decided and notified

by the University and shall be held as per the schedule given in the Table below.

Table

Sr. No.	Name of the examination	Regular Admitted, & Ex Students Examination	Regular Admitted, & Ex Students Examination
1	M.A. Semester I & III	Winter	Summer
2	M.A. Semester II & IV	Summer	Winter

7. Admission & Eligibility to the Programme:

a) Subject to the compliance with the provisions of this Direction and of other ordinances in force from time to time, an applicant for admission to Semester-I examination shall have passed the Bachelor Degree examination of this university or of any other statutory recognized university as equivalent to the Bachelor Degree of this university.

b) The applicant who has passed Semester-I shall be eligible for admission to Semester-II subject to ATKT rules.

c) The applicant who has passed Semester-II shall be eligible for admission to Semester-III subject to ATKT rules.

d) The applicant who has passed Semester-III shall be eligible for admission to Semester-IV subject to ATKT rules.

8. **ATKT Rules:** The ATKT rules for admission of the students shall be as per the provisions of Direction No.10 of 2019 as renewed and or modified from time to time.

9. Without prejudice to other provisions of Ordinance No. 6, relating to the Examinations in general, provisions of Para 5, 8, 9, 10, 26, 31 and 32 of the said ordinance shall apply to every student admitted to this course.

10. The fees for the tuition, examination, laboratory and under other heads shall be as prescribed by the university from time to time.

11. (a) The scope of the subjects shall be as prescribed in the syllabus.

(b) The medium of instruction and examination shall be English/Hindi/ Marathi except language subjects.

12. The number of papers and maximum marks assigned to each paper and minimum marks / grade, an examinee must obtain in order to pass the examination shall be as prescribed in appendices 1 to 6 of this Direction.

13. The examinee at each of the examination shall have option of not being declared successful at the examination in case he / she does not secure a minimum of grade equivalent to 55% marks at the examination. This option will have to be exercised by the candidate every time the application is submitted for any of the examination. Once this option is exercised it shall be binding on the examinee and therefore the candidate will not be allowed to revoke it under any circumstances.

14. The classification of the examinee successful at the end semester examinations and at the end of final semester examination shall be as per the rules and regulations of Choice Based Credit System as prescribed in appendices, appended with this Direction.

15. The provisions of Ordinance No. 3 of 2007 for the award of grace marks for passing an examination, securing higher grade in the subject(s) as updated from time to time shall apply to the examination under this Direction.

16. The names of the successful examinee passing the examination as a whole in the minimum prescribed period and securing the grades equivalent to first and second division shall be arranged in order of merit as provided in ordinance No. 6 relating to examinations in general.

17. Successful examinees at the end of M.A. Semester-IV Examination who obtained CGPA above 7.51 shall be placed in First Division with distinction, those obtaining CGPA from 6.00 to 7.50 shall be placed in First Division, those obtaining CGPA from 4.50 to 5.99 shall be

placed in Second Division and those obtaining CGPA from 4.00 to 4.49 shall be placed in Third Division.

18. No candidate shall be admitted to an examination under this Direction, if he / she has already passed the same examination of this university or of any other university.

19. Successful examinees at the M.A. Semester I, II, III, & IV Examinations shall be entitled to receive a Statement of marks signed by the Director, Board of Examinations and Evaluation of the University and successful examinees at the end of M.A. Semester IV examination shall, on payment of prescribed fees, receive a Degree in the prescribed format, signed by the Vice-Chancellor.

20. This programme is based on Choice Based Credit System and therefore, it will also be regulated by guidelines and regulation given in appendices which are part of this Direction.

21. **Absorption scheme for failure students of the old credit based semester pattern:**

a) While switching over to New Choice Based Credit System, the failure students of old choice based credit system semester pattern will be given **Five** chances to clear the examination from the Winter 2022 of 1st & 2nd Semester, Summer 2023 of 3rd Semester and Winter 2023 of 4th Semester.

b) The candidates who have cleared first and second semester of Part I of the old Choice based Credit system Semester Pattern examination in the concerned subject shall get admission to Third Semester of the New Choice Based Credit System Semester Pattern directly. Similarly the candidates who are allowed to keep term will also be eligible for admission to Third Semester of the New Choice Based Credit System.

c) The failure students of the old CBCS course who have exhausted the permissible chances under clause (a) shall have to appear in the matching papers as per the scheme given in Appendix-IX onward hereto.

22. If an examinee fails to pass the M.A. course, governed by this Direction, within five successive years from the date of his/her first

admission to particular programme he/she shall be declared as 'Not fit for the Course' (NFC) and he/she will not be allowed to appear further for any exam of the same course.

23. **Guidelines for Students, Supervisors and Examiners**

i) In each semester the student will have to deliver a seminar on any topic relevant to the syllabus / subject encompassing the recent trends and development in that field/ subject. The topic of the seminar will be decided at the beginning of each semester in consultation with the supervising teachers. The student has to deliver the seminar which will be followed by discussion. The seminar will be open to all the teachers of the department, invitees, and students.

ii) The students should submit the assignment properly bound in two copies to the head of the department. The said shall be evaluated by the concerned supervisor / head of the department.

iii) The marks of the Internal Assessment shall be forwarded to the university within due period through head of the Department. The record of the seminar and assignment should be preserved till the declaration of the final result.

a) The internal assessment marks shall be awarded by the concerned teacher.

b) The internal assessment shall be completed by the College / University at least 15 days prior to the final examination of each semester. The Marks shall be sent to the University immediately after the Assessment in the prescribed format.

24. **General guidelines for Internal Assessment are:**

a) The internal assessment marks assigned to each theory paper as mentioned in Appendices shall be awarded on the basis of assignments like class test, attendance, home assignments, study tour, visit to educational institutions and research organizations, field work, group discussions or any other innovative practice / activity.

b) There shall be one assignment (as described above) per Theory paper.

c) There shall be no separate / extra allotment of work load to the teacher concerned. He/ She shall conduct the internal

assessment activity during the regular teaching days / periods as a part of regular teaching activity.

d) The concerned teacher / department / college shall have to keep the record of all the above activities until six months after the declaration of the results of that semester.

e) At the beginning of each semester, every teacher / department / college shall inform his / her students unambiguously the method he / she propose to adopt and the scheme of marking for internal assessment.

f) Teacher shall announce the schedule of activity for internal assessment in advance in consultation with HOD / Principal.

g) Final submission of internal marks to the University shall be before the commencement of the University Theory / Practical examinations whichever is later.

25. Guidelines for Project work/Skill Programmes of Swayam of like nature,

Every semester student has to complete the skill component of 4 credits which can be either one course or in two parts as Project for 2 credits and Online Skill programme of 2 Credits as specified in this Direction. The supervision of the Project work and examination shall be entirely done at college level only.

26. One credit course of theory will be of one clock hour per week of 25 marks running for 15 weeks and four credit course of theory will be of four clock hours per week of 100 marks running for 15 weeks.

27. One credit course of practical will consist of two clock hours of laboratory exercise of 25 marks running for 15 weeks and four credit course of practical will consist of eight hours of laboratory exercise of 100 marks running for 15 weeks.

28. **Practical Examination**

i) Each practical carries 100 marks. For the examination, the distribution of the marks shall be as follows:

a.	Record / Journal / Internal assessment	: 20 marks – Evaluated by Internal
b.	Practical Performance	: 60 marks – Evaluated jointly by & Internal
c.	Viva-voce	: 20 marks – Evaluated by External

NOTE: Practical performance shall be jointly evaluated by the External and Internal Examiner. In case of discrepancy, the

External Examiner's decision shall be final.

ii) Practical exam shall be of 3 to 8 hours duration for one or two days, depending on subject and number of students.

iii) The Practical Record of every student shall carry a certificate as shown below, duly signed by the teacher-in-charge and the Head of the Department.

iv) If the student fails to submit his / her certified Practical Record duly signed by the Teacher-In-Charge and the Head of the Department, he / she shall not be allowed to appear for the Practical Examination and no Marks shall be allotted to the student.

v) The certificate template shall be as follows:

CERTIFICATE

Name of the college / institution _____

_____

Name of the Department: _____

_____

This is to certify that this Practical Record contains the bonafide record of the Practical work of Shri / Shrimati / Kumari _____

_____ of M.A. _____

_____ Semester _____ during the academic year _____

_. The candidate has satisfactorily completed the experiments prescribed by Rashtrasant Tukdoji Maharaj Nagpur University for the subject _____

_____

Dated ___/___/_____

Signature of the teacher who taught the examinee.

1._____

2._____

Head of the Department

29. General Rules and Regulations regarding pattern of question paper and choice based credit system:

I) Pattern of Question Paper

i) There will be four units in each paper.

ii) Maximum marks of each theory paper will be 80

iii) Question paper will consist of five questions, each of 16 marks.

iv) Four questions will be on four units with internal choice (One question on each unit).

v) Fifth question will be compulsory with questions from each of the four

units having equal weightage and there will be no internal choice.

II) Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA)

M.A. Program shall consist of four semesters, wherein the student has to complete certain number of credits as indicated in Table 1. Each subject (or course) has fixed number of credits. The types of subject subheads are: Core, Electives, Foundation Course; Seminar and Assignment.

Among the 80 credits which candidate needs to complete and clear for M.A.

Table 1: Credit Requirements for Post Graduate Studies-

Post Graduate	Semester	Core	Elective	Skill	Total Credits
All Subject mention in this Direction Except Practical Subject	I	08	08	04	20
	II	08	08	04	20
	III	08	08	04	20
	IV	08	08	04	20
		32	32	16	80

Explanatory terms:

i). **Core:** Major theory papers in the concerned subject, as per respective Syllabus

ii). **Elective:** These papers will be specialization in the concerned subject, as per respective Syllabus

iii). **Skill** : Every semester 04 credit course **shall** kept for skill component which includes skill programmes **from** Swayam or similar portals or project work to be done at college level.

30. **Credits: Semester Grade Point Average and Cumulative Grade Point Average:**

i) It is a unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching (lecture or tutorial) or two hours of practical work / field work per week.

For example a subject with 6-2-6 (L-T-P) means it has 3 Lectures, 1 Tutorial and 6 Practical in a week. This subject will have ten credits (6x1 + 2x½ + 6x½ = 10). If a student is declared pass in a subject, then he/she gets the credits associated with that subject. Depending on the marks scored in a subject, student is given a Grade. Each grade has got certain grade points as follows;

Letter Grade	O	A+	A	B+	B	C	P	F	Ab
Grade Point	10	09	08	07	06	05	04	0	0

A student obtaining Grade F shall be considered failed and will be required to reappear for the examination.

ii) Valuation pattern:

Every credit is for 25 marks and valuation and grade points will be given as per following pattern.

Marks obtained in Theory / Practical of 100 marks	Marks obtained in Theory / Practical of 50 marks	Letter Grade	Grade point
90 - 100	45 - 50	O	9.00 - 10.00
80 - < 90	40 - < 45	A+	8.00 - < 9.00
70 - < 80	35 - < 40	A	7.00 - < 8.00
60 - < 70	30 - < 35	B+	6.00 - < 7.00
50 - < 60	25 - < 30	B	5.00 - < 6.00
45 - <50	23 - < 25	C	4.50 - < 5.00
40 - < 45	20 - < 23	P	4.00 - < 4.50
Below 40	Below 20	F	Below 4
Absent	Absent	AB	0

- **Total marks obtained by the student will be mentioned on the mark sheet along with the grade.**

iii) Computation of SGPA and CGPA

Following is the procedure to compute the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

i. The SGPA is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e

SGPA (Si) = Σ(Ci x Gi) / Σ Ci

where Ci is the number of credits of the 'i' th subject and Gi is the grade point scored by the student in the 'i' th subject i = 1,2,3.....upto number of subject in that semester

Illustration for SGPA

Code	Theory / Practical	Credits	Marks Obtained	Out of	Grade Point	Grade Letter	Credit Point (Credit x Grade Point)
Core	Paper 1	4	84	100	9	O	4x9=36
Core	Paper 2	4	68	100	7	B+	4x7=28
Elective	Paper 3	4	52	100	6	B	4x6=24
Foundation	Paper 4	4	47	100	5	P	4x5=20

Skill	Paper 5	4	60	100	6	B	4X6=24
	Total	**20**					**132**
		Thus, SGPA =132/20 = 6.6					

ii. The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a program, i.e.

CGPA = Σ (Cj x Gj) / Σ Cj

Where, Cj in the credit for 'j' th subject Gj in the Grade Point earned for 'j' th subject

Where, 'j' = 1,2,3.....total number of subject in all semesters

The SGPA and CGPA shall be rounded off to 2 decimal points and re ported in the transcripts. Ex. 7.0765 = 7.08 or 6.5168 = 6.52 etc.

Transcript (Format). Based on the above recommendations on Letter grades, grade points and SGPA and CCPA, the HEIs may issue the transcript for each semester and a consolidated transcript indicating the performance in all semesters.

31. Notwithstanding the lapse of Direction No. 1 of 2023 prior to issuance of this Direction all the actions taken by the University or the college conducting/offering programme governed by this Direction shall be deemed to have been taken in pursuance of the provisions of this Direction and hence shall be binding on all the parties.

32. Any doubt or a question arising out of interpretation or application of any provisions of this Direction shall be referred to the decision of the Vice-Chancellor whose opinion in the matter shall be final and binding on all the parties.

(Dr. Subhash R. Chaudhari)
Vice-Chancellor

Nagpur
Date: 19-10-23

SCHEMES OF EXAMINATIONS OF FACULTY UNDER THE SUBJECT OF HISTORY, ECONOMICS, POLITICAL SCIENCE, SOCIOLOGY, PHILOSOPHY, PSYCHOLOGY, GEOGRAPHY, HOME ECOMOMICS, WOMEN'S STUDIES & DEVELOPMENT, DR. AMBEDKAR THOUGHT, PUBLIC ADMINISTRATION, BUDDHIST STUDIES, ANCIENT INDIAN HISTORY CULTURE & ARCHAEOLOGY , GANDHIAN THOUGHT , TRAVEL & TOURISM , RASHTRASANT TUKADOJI MAHARAJ THOUGHT, ENGLISH, MARATHI, HINDI, URDU, SANSKRIT, PALI & PRAKRIT PERSIAN, MUSIC, LINGUISTICS AND OTHER INDIAN LANGUAGES.

Appendix-I(A)

Semester I & II for M.A. Programme in all subjects except Practical Subject

Code	Theory	Teaching Scheme (Hours/Week)			Credits	Examination Scheme					
		Th	Int. Ass	Total		Duration in hrs,	Max. Marks External marks	Max. Marks Internal Assmnt	Total	Minimum Passing Marks Th	Minimum Passing Marks Int. Ass
	Paper										
Core	1	4	--	4	4	3	80	20	100	32	08
Core	2	4	--	4	4	3	80	20	100	32	08
Elective/core	3	4	--	4	4	3	80	20	100	32	08
Elective/core	4	4	--	4	4	3	80	20	100	32	08
Skill*	5	4	--	4	4	---	--	--	100	--	--
Total		20	--	20	20		320	80	500	---	---

* Skill course can be by way of project/seminar or SWAYAM or other similar platforms and therefore minimum passing marks etc. will be determined by the agency conducting such course. In case of project the entire 100 marks project or if prescribed for 50 marks and 2 credit the examination will be completely internal only.

Note :-1.Subject code and other details as per respective syllabus

2)In addition to the theory papers, students will be required to undertake Practical Work also (6 hours per week). They have to spin 500 grams of cotton during each Semester. Otherwise they will not be allowed to appear for the examination of Gandhian Thought Course.

Appendix-I (B)

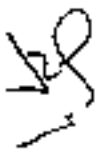
Semester III & IV for M.A. Programme in all subjects except Practical Subject

Code	Theory Paper	Teaching Scheme (Hours/Week) Th	Int. Ass	Total	Credits	Duration in hrs.	Max. Marks External marks	Internal Assnt	Total	Minimum Passing Marks Th	Int. Ass
Core	1	4	--	4	4	3	80	20	100	32	08
Core	2	4	--	4	4	3	80	20	100	32	08
Elective	3	4	--	4	4	3	80	20	100	32	08
Foundation or core	4	4	--	4	4	3	80	20	100	32	08
Skill*	5	4	--	4	4	---	--	--	100	--	--
Total		20	--	20	20		320	80	500	---	---

Note :- 1) Subject code and other details as per respective syllabus

2) In addition to the theory papers, students will be required to undertake Practical Work also (6 hours per week). They have to spin 500 grams of cotton during each Semester. Otherwise they will not be allowed to appear for the examination of Gandhian Thought Course.

3) Students should filed work and Intern ship in any women's related NGO (Intern ship report) or Research Project for the M.A fourth semester is compulsory in the Women's Studies Course.



Appendix-II

Semester I &II for M. A PSYCHOLOGY Programme										
Theory	Teaching Scheme (Hrs/Week)			Credit	Examination Scheme			Total	Minimum Passing Marks 50%	
Paper	Theory	Practical	Total		Duration in Hours	External Marks	Internal Assessment		Theory	Internal Assessment
Core I	4	--	4	4	3	60	40	100	30	20
Core II	4	--	4	4	3	60	40	100	30	20
Elective I-a or Elective I-b	4	--	4	4	3	60	40	100	30	20
Elective II-a or Elective II-b	4	--	4	4	3	60	40	100	30	20
Practicum Core	--	12	12	4	3	60	40	100	30	20
Audit Course /Skill based Swayam/MOOCs (Satisfactory Grade (SF))	2	--	2	-	-	-	-	-	-	-
Total	18	12	30	20	-	300	200	500	150	100

Note:

1. Minimum passing marks in each head (Theory [External + Internal], Practical [External + Internal] will be 50 % of the maximum marks prescribed.
2. Students can opt any one paper from both Elective I and Elective II.
3. Students will have to earn satisfactory Grade (SF) in the audit course to become eligible for the award of the Degree as per R.4.6 of Direction No. 14 of 2022.

RASHTRASANT TUKDO[illegible] MAHARAJ NAGPUR UNIVERSI[illegible], NAGPUR
Choice Based Credit System (CBCS) Course Structure
Subject-Geography Faculty: Humanities
M.A. First Year Semester I (New Pattern)
with effect from: June, 2022

Appendix - III

Semester	Core Course	Paper No.	Name of the Paper	Lectures/ Week	Total No. of Lect. Per Sem.	CA	ESE	Total Marks	Credits	Minimum Passing Marks
I	GgC-101	I	Geomorphology (Core)	04	60	20	80	100	04	40
	GgC-102	II	Oceanography (Core)	04	60	20	80	100	04	40
	GgE-103	III	History of Geographical Thought (Elective)	04	60	20	80	100	04	40
	GgE104	III	Political Geography (Elective)							
	GgE-105	IV	Biogeography (Elective)	04	60	20	80	100	04	40
	GgE-106	IV	Soil Geography (Elective)							
	GgP-101	V	Practical- I (Core) Skill Based	08	60	10	40	50	02	25
	GgP-102	VI	Practical-II (Core) Skill Based	08	60	10	40	50	02	25
Semester - I Total				32	360	100	400	500	20	210

01/8/2023 01/08/2023 01/08/2023

RASHTRASANT TUKDOJI MAHARAJ NAGPUR UNIVERSITY, NAGPUR
Choice Based Credit System (CBCS) Course Structure
Subject-Geography Faculty: Humanities
M.A. First Year Semester II (New Pattern)
with effect from: June, 2022

Appendix – III

Semester	Core Course	Paper No.	Name of the Paper	Lectures / Week	Total No. of Lect. Per Sem.	CA	ESE	Total Marks	Credits	Minimum Passing Marks
II	GgC-201	I	Climatology (Core)	04	60	20	80	100	04	40
	GgC-202	II	Research Methodology (Core)	04	60	20	80	100	04	40
	GgE-203	III	Environmental Geography (Elective)	04	60	20	80	100	04	40
	GgE204		Introduction to Remote Sensing and GIS (Elective)							
	GgE-205	IV	Geography of India (Elective)	04	60	20	80	100	04	40
	GgE-206		Medical geography (Elective)							
	GgP-201	V	Practical- I (Core) Skill Based	08	60	10	40	50	02	25
	GgP-202	VI	Practical-II (Core) Skill Based	08	60	10	40	50	02	25
Semester – II Total				**32**	**360**	**100**	**400**	**500**	**20**	**210**

01/08/2023 01/08/2023 1/8/23 1/8/23

Rashtra Sant Tukadoji Maharaj Nagpur University, Nagpur.

M.A. Home Economics - NEP-2020 Based (Choice Based Credit System)

Appendix - IX

Semester I

Sr. No.	Paper	Subject code	Subject	Teaching Scheme (Hrs/Week)				Credit	Examination Scheme				
				Theory (Hours)	Practical/ (Hours)	Project/ Sessional (Hours)	Total (Hours)	1 Hr. Th. = 1 2 Hr. Pr. = 1 2 Hr. Project/	Duration (Hours)	Max. Marks		Total Marks	Min. Passing Marks
										External Th. Marks	Pract/ Internal Marks.		
1	I (Core)	1T1	Research Methods and Statistics	04	-	02	06	4	03	80	20	100	40
2	II (Core)	1T2	Textile and Clothing	04	-	02	06	4	03	80	20	100	40
3	III (Elective)	1T3	Resource Management **OR** Residential Interior Design	04	-	02	06	4	03	80	20	100	40
4	IV (Elective)	1T4	Human Development Of Early Childhood Care and Education (ECCE).	04	-	02	06	4	03	80	20	100	40
5.	Practical/ Skill Based	1P1	Textile and Clothing Practical	—	04	-	04	4	03	80	20	100	40
			Total	**16**	**04**	**08**	**28**	**20**	**15**	**400**	**100**	**500**	**200**

(Subject Code: 1-Semester I, T-Theory, P-Practical)

S Nasim

Rashtra Sant Tukadoji Maharaj Nagpur University, Nagpur.

M.A. Home Economics -NEP-2020 Based-(Choice Based Credit System)

Semester II

Appendix - IV

Sr. No.	Paper	Subject code	Subject	Teaching Scheme (Hrs/Week)				Credit 1Hr.Th.= 1 2Hr. Pr.= 1 2Hr.Project /Sessional	Examination Scheme				
				Theory (Hours)	Practical/ (Hours)	Project/ Sessional (Hours)	Total (Hours)		Duration (Hours)	Max. Marks		Total Marks	Min. Passing Marks
										External Th. Marks	Pract./ Internal Marks.		
1	I (Core)	2T1	Research Methods and Statistics	04	-	02	06	4	03	80	20	100	40
2	II (Core)	2T2	Textile and Clothing	04	-	02	06	4	03	80	20	100	40
3	III (Elective)	2T3	Resource Management OR Garbha Sanskar	04	-	02	06	4	03	80	20	100	40
4	IV (Elective)	2T4	Human Development OR Guidance and Counselling	04	-	02	06	4	03	80	20	100	40
5	Practical/ Skill Based	2P1	Textile and Clothing Practical	—	04	-	04	4	03	80	20	100	40
			Total	16	04	08	28	20	15	400	100	500	200

(Subject Code: 2-Semester II, T-Theory, P-Practical)

S. Nasim

Appendix - IV

Rashtra Sant Tukadoji Maharaj Nagpur University, Nagpur.

M.A. Home Economics -NEP-2020 (Choice Based Credit System)

Semester -III

					Teaching Scheme (Hrs/Week)			Credit		Examination Scheme			
Sr. No.	Paper	Subject Code	Subject	Theory (Hours)	Practical (Hours)	Project/ Sessional (Hours)	Total (Hours)	1Hr.Th.= 1 2Hr. Pr.=1 2Hr.Project /Sessional	Duration (Hours)	Max. Marks		Total Marks	Min. Passing Marks
										External Th. Marks	Pract./ Internal Marks.		
1	I	3T1	Core -Food and Nutrition	04	-	02	06	4	03	80	20	100	40
2	II	3T2	Core- Consumer and The Market	04	-	02	06	4	03	80	20	100	40
3	III	3T3	**Elective 1(a)**Home Science Extension Education **OR** **Elective 1(b)** Housing and Interior. **OR** **Elective 1(c)** Gender and Development	04	-	02	06	4	03	80	20	100	40
4	IV	3T4	Elective- Family Dynamics **OR** Communication Technologies in Extension (Elective)	04	-	02	06	4	03	80	20	100	40
5.	Practical/Skill Based	3P1	Food and Nutrition(Practical)	--	04		04	4	03	80	20	100	40
			Total	**16**	**04**	**08**	**28**	**20**	**15**	**400**	**100**	**500**	**200**

(Subject Code: 3-Semester III, T-Theory, P-Practical)

40

Appendix -IV

Rashtra Sant Tukadoji Maharaj Nagpur University, Nagpur.
M.A. Home Economics -NEP-2020 Based (Choice Based Credit System)
Semester IV

Sr. No.	Paper	Subject Code	Subject	Teaching Scheme (Hrs/Week)				Credit	Duration (Hours)	Examination Scheme			
				Theory (Hours)	Practical (Hours)	Project/Sessional (Hours)	Total (Hour)	1Hr.Th.= 1 2Hr. Pr.=1 2Hr.Project/ Sessional		Max. Marks		Total Marks	Min. Passing Marks
										Extern ITh. Marks	Pract/ Internal Marks		
1	I	4T1	Core- Food and Nutrition	04	-	02	06	4	03	80	20	100	40
2	II	4T2	Core- Consumer and The Market	04	-	02	06	4	03	80	20	100	40
3	III	4T3	Elective 1(a) Home SafenceExtension Education OR Elective 1(b)Housing and Interior OR Elective 1 (c) Entrepreneurship Development	04	-	02	06	4	03	80	20	100	40
4	IV	4T4	Elective-Family Dynamics OR Family Relations and Family Welfare	04	-	02	06	4	03	80	20	100	40
5	Practical/Skill Based	4P1	Food andNutrition Practical	-	04	-	04	4	03	80	20	100	40
			Total	16	04	08	28	20	15	400	100	500	200

(Subject Code: 4-Semester IV, T-Theory, P-Practical)

Post Graduate Degree in M.A Economics

Implementation from the Academic Session 2022-23

Teaching and Examination Scheme

M.A (Economics) Programme : Semester - 1

Appendix-V (A)

Course Code	Theory Paper	Teaching Scheme (Hours/Week)			Credits	Examination Scheme			Total	Minimum Passing Marks	
		Theory	Internal Ass.	Total		Duration in Hrs.	Max. Marks: External Marks	Max. Marks: Internal Ass.		Theory	Internal Ass.
	Core Course Subjects:										
	1. Micro Economic Theory – I	04	-	04	04	03	80	20	100	32	08
	2. Macro-Economic Theory – I	04	-	04	04	03	80	20	100	32	08
	I. Elective Course Subjects: (Choose Any One)					03	80	20	100	32	08
	1. Indian Economy- Issues & Policies	04	-	04	04						
	2. Mathematics for Economics	04	-	04	04						
	II. Elective Course Subjects: (Choose Any One)					03	80	20	100	32	08
	1. Agricultural Economics	04	-	04	04						
	2. Industrial Economics	04	-	04	04						
	Total	16		16	16		320	80	400	32	08
	III. Elective Courses (Compulsory):										
	1. Skill Based Program	-	02	02	02	2	-	50	50	-	25
	2. Activity Based Learning	-	02	02	02	2	-	50	50	-	25
	Total	16	04	20	20			-	500	-	-

Note: The 3rd Elective Course is compulsory for all Semester Post-Graduate programme in M.A (Economics). Skill based Course (2 Credit) and Activity based learning (2 Credit) in this elective will carry 50 marks each and total allotted 4 credits. Moreover, the functioning of this third elective course will be at the college level course (CLC).

M.A (Economics) Programme : Semester - II

Appendix -V (B)

Course Code	Theory Paper	Teaching Scheme (Hours/Week)			Credits	Examination Scheme			Total	Minimum Passing Marks	
		Theory	Internal Ass.	Total		Duration in Hrs.	Max. Marks External Marks	Internal Ass.		Theory	Internal Ass.
	Core Course Subjects: 1. Micro Economic Theory – II	04	-	04	04	03	80	20	100	32	08
	2. Macro-Economic Theory - II	04	-	04	04	03	80	20	100	32	08
	I. Elective Course Subjects: (Choose Any One) 1. Economics of Micro-finance	04	-	04	04	03	80	20	100	32	08
	2. Applied Econometrics	04	-	04	04						
	II. Elective Course Subjects: (Choose Any One) 1. Statistics for Economics	04	-	04	04	03	80	20	100	32	08
	2. Natural Resource Economics	04	-	04	04						
	Total	16		16	16		320	80	400	32	08
	III. Elective Courses (Compulsory): 1. Skill Based Program	-	02	02	02	2	-	50	50	-	25
	2. Project Work	-	02	02	02	2	-	50	50	-	25
	Total	16	04	20	20			-	500	-	-

M. A. Indian Music Examination (C.B.C.S.)
Semester Pattern
Effective from 2022 – 23 progressively

Appendex - VI

The Course of Study and the Scheme of Examination

Year /Sem	Subject	Paper	Title of the Paper	Ins. Hrs / Week	Credit	Maximum Marks		
						CIA	Uni. Ex.	Total
I Year I Sem	Core	1P1	Practical Test	4	4	20	80	100
	Core	1P2	Mazlis Performance	4	4	20	80	100
	Core	1T3	Theory Paper I (क्रियात्मक शास्त्र)	4	4	20	80	100
	Core	1T4	Theory Paper II (इतिहास व शास्त्राभ्यास)	4	4	20	80	100
	Elective (Skill Based)	1T5 (A)	Introduction to Ghazal	4	4	20	80	100
	Elective	1T5 (B)	Course from SWAYAM			20	80	100
			Cumulative Sem I Credits	20	20			500
I Year II Sem	Core	2P1	Practical Test	4	4	20	80	100
	Core	2P2	Mazlis Performance	4	4	20	80	100
	Core	2T3	Theory Paper I (क्रियात्मक शास्त्र)	4	4	20	80	100
	Core	2T4	Theory Paper II (संगीतातील विज्ञान व प्रयोगशास्त्र)	4	4	20	80	100
	Elective (Skill Based)	2T5 (A)	Introduction to Sound Technology		4	20	80	100
			Course from SWAYAM			20	80	100
			Cumulative Sem II	20	20			500
	Core	3P1	Practical Test	4	4	20	80	100

Appendix - VI

II Year III Sem	Core	3P2	Mazlis Performance	4	4	20	80	100
	Core	3T3	Theory Paper I (क्रियात्मक व उपयोजित शास्त्र)	4	4	20	80	100
	Core	3T4	Theory Paper II (संगीतातील स्थित्यंतरे)	4	4	20	80	100
			Internship		2			50
	Elective (Skill Based)	3T5 (A)	Theoretical Introduction to Instrumental Music (स्वर वाद्य)	4	2	10	40	50
	Elective	3T5 (B)	Course from SWAYAM		4			100
			Cumulative Sem III Credits	20	20			500
II Year IV Sem	Core	4P1	Practical Test	4	4	20	80	100
	Core	4P2	Majlis Performance	4	4	20	80	100
	Core	4T3	क्रियात्मक व सौंदर्य शास्त्र	4	4	20	80	100
	Core	4T4	संगीतातील सं ोधन	4	4	20	80	100
	Elective (Skill Based)	4T5 (A)	संगीत निर्दे न end Dissertation	4	4	20	80	50 50
	Elective	4T5 (B)	Course from SWAYAM	4				100
	Elective	4T5 (C)						
			Cumulative Sem IV	20	20			500

Semi-detailed

Nagalwar

21/8/23

RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY, NAGPUR

FACULTY OF SCIENCE

DIRECTION NO. 9 OF 2016

DIRECTION GOVERNING THE EXAMINATION LEADING TO THE DEGREE OF BACHELOR OF SCIENCE

(THREE YEARS DEGREE COURSE – SEMESTER PATTERN)

(Issued under Section 14(8) of the Maharashtra Universities Act, 1994)

Whereas, Maharashtra Universities Act No. XXXV has come into force with effect from 22nd July, 1994 and further amended by Maharashtra Universities (Amendment and Continuance)Act, 2003, hereinafter referred as 'Act' has come into force from 8th August 2003.

AND

Whereas, the University Grants Commission, New Delhi vide letter No.D.O.No.F 1-2/2008/(XI Plan), dated.31 Jan.2008 regarding new initiatives under the XIth Plan – Academic Reforms in the University has suggested for improving quality of higher education and to initiate the Academic Reforms at the earliest.

AND

Whereas, the Board of Studies in all the Science subjects in their meeting held during 21/04/2012 prepared the syllabi and scheme of examination for the B. Sc. degree course and recommended for starting of the semester pattern in Faculty of Science from the academic session 2013-14,

AND

Whereas, the recommendations of various Board of Studies in the faculty of Science regarding Upgradation and Revision of various syllabi and introduction and implementation of Semester Pattern Examination System at under graduate level was considered by the faculty of Science in its meeting held on 19/09/2012 and constituted a Committee to decide the policy decision regarding semester pattern examination system.

AND

Whereas, the Dean, Faculty of Science has consented to the syllabi and the scheme of examination for the award of B.Sc. degree in Faculty of Science,

AND

Whereas, the faculty of Science in its meeting held on 19/09/2012 vide item No. 35, has considered, accepted and recommended to Academic Council, the policy decision regarding introduction of Semester pattern and the draft syllabi of B.Sc. Semester-I & VI along with draft direction and other details.

AND

Whereas, the Emergent Faculty of Science in its meeting held on 27.1.2015, has considered, accepted and recommended to Academic Council, for B.Sc. Semester-I to VI along with draft direction and other details.

AND

Whereas, the Vice Chancellor of Rashtrasant Tukadoji Maharaj Nagpur University, in exercise of powers conferred upon me under sub-section (7) of section 14 of the Maharashtra Universities Act., 1994, on behalf of the Academic Council & Management Council for B.Sc. along with draft direction and other details.

AND

Whereas, the new scheme of examination as per semester pattern is to be implemented from the Academic Session 2013-14 for B. Sc. First Year & onwards which is to be regulated by this direction and as such there is no direction issued and in existence and framing of an Ordinance for the above examination is a time consuming process.

AND

Whereas, the admission of students in the semester pattern at B.Sc. First Year are to be made in the Academic Session 2013-14.

Now, therefore, I, Dr. V.S. Deshpande, Vice Chancellor of Rashtrasant Tukadoji Maharaj Nagpur University, in exercise of powers conferred upon me under sub-section (8) of section 14 of the Maharashtra Universities Act., 1994, do hereby direct as under:

1. This Direction may be called, **"Examination leading to the Degree of Bachelor of Science (Three Year Degree Course-Semester Pattern).**

2. This direction shall come into force with effect from the date of its issuance.

3. (i) The following shall be the examination leading to the Degree of Bachelor of Science in the faculty of Science namely:

a. The B.Sc. Semester-I Examination;

b. The B.Sc. Semester-II Examination;

c. The B.Sc. Semester-III Examination;

d. The B.Sc. Semester-IV Examination;

e. The B.Sc. Semester-V Examination; and

f. The B.Sc. Semester-VI Examination.

(ii) The period of Academic Session shall be such, as may be notified by the University.

4. The theory examination of Semester-I, II, III, IV, V and VI shall be conducted by the University and shall be held separately at the end of each semester at such places and dates as may be decided by the University and shall be held as per the schedule given in Table 1.

Table 1

Sr. No	Name of the Examination	Main Examination	Supplementary Examination
1	Semester I, III and V	Winter	Summer
2	Semester II, IV, and VI	Summer	Winter

5. Subject to compliance with the provisions of this Direction and of other Ordinances in-force from time to time, the following persons shall be eligible for admission to the examinations:-

(a) A student who has prosecuted a regular course of study for not less than one academic year prior to that examination;

(b) A teacher in an Educational Institution eligible under the provisions of Ordinance No. 18, and

(c) A women candidate who has not pursued a regular course of study.

Provided that in the case of the persons eligible under clauses (b) and (c), an applicant to the examination shall have attended a full course of laboratory instructions in a College in the subject in which laboratory work is prescribed. The candidate shall submit a Certificate to that effect signed by the Principal of the college.

6. Eligibility of every applicant for admission to B. Sc. Semester course shall:-

A) In case of the B. Sc. Semester I examination:-

The candidate should have passed the 12th Standard Examination of the Maharashtra State Board of Secondary and Higher Secondary Education with English and other Modern Indian Languages together with any three Science subjects comprised in the faculty of Science or an examination recognized as equivalent thereto in such subjects and with such standards of attainments as may be prescribed.

Provided that students passing the 12th Standard Examination of the Maharashtra State Board of Secondary and Higher Secondary Education and offering Vocational Stream with one Language only and with any one of the following groups of subjects shall be eligible for admission to the B. Sc. Semester I course and in onward semesters with the corresponding group of subjects as shown in Table 2:-

Table 2

S. No.	Groups of subjects of 12th Standard students	Corresponding Next Higher Examination groups of Science subjects at B. Sc. Semester I (Along with Compulsory English and any one of the languages from Marathi, Hindi, Urdu, Gujarati, Telugu, Bengali, Sanskrit, Supplementary English, French, German, Russian, Persian, Arabic, Pali and Prakrit or Latin in B. Sc. Semester I & II only).
1	1. English or Any Modern Language 2. Physics, Chemistry, Mathematics, Biology	Combination of any 3 science subjects as shown in table 4 from among Physics, Chemistry, Mathematics, Statistics, Geology, Electronics, Industrial Chemistry, Computer Science, Information Technology, Botany, Zoology, Biochemistry, Microbiology, Biotechnology, Environmental Science, Sericulture, Geo-exploration and Drilling Technology, Computer Maintenance, Electronic Equipment Maintenance, Industrial Fish & Fisheries
2	1. English or Any Modern Language 2. Vocational Course of 200 Marks 3. Physics, Chemistry, Mathematics	Combination of any 3 science subjects as shown in table 4 from among Physics, Chemistry, Mathematics, Statistics, Computer Science, Information Technology, Geology, Electronics, Industrial Chemistry, Geo-exploration and Drilling Technology, Computer Maintenance, Electronic Equipment Maintenance.
3	1. English or Any Modern Language 2. Vocational Course of 200 Marks 3. Physics, Chemistry, Biology	Combination of any 3 science subjects as shown in table 4 from among Chemistry, Botany, Zoology, Biochemistry, Microbiology, Biotechnology, Geology, Computer Science, Information Technology, Industrial Chemistry, Environmental Science, Sericulture, Geo-exploration and Drilling Technology, Computer Maintenance, Electronic Equipment Maintenance, Industrial Fish & Fisheries
4	MCVC Group	

	a) Agriculture Group Or Fisheries Group	Combination of any 3 science subjects as shown in table 4 from among Botany, Zoology, Microbiology, Bio-Technology, Bio-Chemistry, Geology, Chemistry, Environmental Science, Sericulture, Industrial Fish & Fisheries
	b) Para-medical group	Combination of any 3 science subjects as shown in table 4 from among Botany, Zoology, Micro-biology, Biochemistry, Bio-Technology, Chemistry, Environmental Science, Sericulture, Industrial Fish & Fisheries.
	c) Engineering and Technology or Engineering & Technology repairs & maintenance group at M.C.V.C.	Combination of any 3 science subjects as shown in table 4 from among Physics, Chemistry, Electronics, Computer Science, Information Technology, Mathematics, Statistics, Industrial Chemistry, Computer Maintenance, Electronics Equipment Maintenance
	d) Engineering and Technology Group Electronics Technology Trade	Combination of any 3 science subjects as shown in table 4 from among Physics, Computer Science, Information Technology, Statistics, Chemistry, Mathematics, Industrial Chemistry, Electronics, Information Technology, Computer Maintenance, Electronic Equipment Maintenance.
NOTE: For finalization of admission under Sr. No. 4 a) and b), Chemistry at Standard XII level will be compulsory AND For admission under Sr. No. 4 c) and d), Mathematics at Standard XII level will be compulsory.		

B) In case of the B. Sc. Semester II, III, IV, V and VI Examinations:- The student should have attended a minimum of 90 days in the respective semester and passed the previous semester examination as per the rules of ATKT as mentioned in Para 7 of this direction.

7) The ATKT rules for admission for the B.Sc. Course **(Theory and Practical as separate passing head and on calculation fraction, if any, shall be ignored)** shall be as given in the following Table- 3.

Table 3

Admission to Semester	**The student should have attended the Session / term satisfactorily**	**Candidates should have passed at least one half of the passing heads of the following examinations (Theory and Practical as separate passing head and on calculation fraction, if any, shall be ignored)**
1	2	3
B. Sc. Semester I	Semester I and admitted As per para 6 of this Direction	---------
B. Sc. Semester II	Semester II	---------
B. Sc. Semester III	Semester III	One half of the total head prescribed for Sem I and Sem II examination
B. Sc. Semester IV	Semester IV	---------
B. Sc. Semester V	Semester V	a) Passed Sem I & II examination and b) One half of the total head prescribed for Sem III & IV examination
B. Sc. Semester VI	Semester VI	---------

8. a) Without prejudice to the other provisions of Ordinance No. 6 relating to the Examinations in General, the provisions of Paragraph 5, 8, 10 and 31 of the said ordinance shall apply to every candidate.

b) The students admitted to this Degree course shall be governed by the general Ordinances / Directions of the University which are applicable to all the regular or ex-students. These Ordinances includes complete as well as relevant provision of Ordinance No. 1, 2, 6, 7-A, 9, 10, 19, 109, Ordinance No. 30 of 2006, (amended Ordinance No. 4 of 2006), Direction 9 of 2008, Direction 5 of 2004 wherever applicable accordingly AND Direction / Ordinance of ATKT as well as reassessment / provisional admission as issued from time to time.

9. The fee for each Semester examination shall be as prescribed by the University from time to time.

10. Every examinee for the B. Sc. Semester I & II examination shall be examined in:

i) Compulsory English

ii) Any one of the following Languages
Marathi, Hindi, Urdu, Supplementary English, Gujarati, Bengali, Telugu, Sanskrit, French, German, Russian, Persian, Arabic, Pali and Prakrit or Latin

iii) Subjects from any one of the following groups, as indicated in Table 4 given below:

Table 4	
Chemistry, Physics, Mathematics	Biotechnology, Microbiology, Chemistry
Chemistry, Statistics, Mathematics	Mathematics, Statistic, Electronics
Chemistry, Zoology, Botany	Electronics, Computer science, Mathematics.
Chemistry, Zoology, Geology	Mathematics , Physics, Geology
Chemistry, Physics, Geology	Mathematics, Chemistry, Computer science
Chemistry, Botany, Geology	Biotechnology, Zoology, Chemistry
Chemistry, Mathematics, Geology	Biotechnology, Botany, Chemistry
Physics, Mathematics, Statistics	Mathematics, Physics, Information Technology
Chemistry, Biochemistry, Environmental Science	Geology, Mathematics, Computer Science
Chemistry, Environmental Science , Geology	Sericulture, Chemistry, Zoology
Chemistry, Zoology, Microbiology	Sericulture, Chemistry, Botany
Chemistry, Botany, Microbiology,	Chemistry, Geology, Geo-exploration and Drilling Technology
Chemistry, Biochemistry, Botany	Physics, Geology, Geo-exploration and Drilling Technology
Chemistry, Biochemistry, Zoology	Mathematics, Geology, Geo-exploration and Drilling Technology
Chemistry, Biochemistry, Microbiology	Statistic, Geology, Geo-exploration and Drilling Technology
Physics, Mathematics, Electronics	Physics, Mathematics, Geo-exploration and Drilling Technology
Chemistry, Physics, Electronics	Chemistry, Physics, Geo-exploration and Drilling Technology
Chemistry, Zoology, Environmental Science	Mathematics, Physics, Computer Maintenance
Chemistry, Botany, Environmental Science	Mathematics, Electronics, Computer Maintenance
Chemistry, Geology, Environmental Science	Mathematics, Chemistry, Computer Maintenance
Chemistry, Microbiology, Environmental Science	Mathematics , Statistics, Computer Science
Chemistry, Statistics, Computer Science	Chemistry, Biochemistry, Geology
Physics, Mathematics, Electronic Equipment Maintenance	Mathematics, Environmental Science, Computer Maintenance
Chemistry, Zoology, Industrial Fish & Fisheries	Biotechnology, Botany, Biochemistry
Physics, Mathematics, Computer Science	Biotechnology, Zoology, Biochemistry
Physics, Statistics, Computer Science	Biotechnology, Microbiology, Biochemistry
Chemistry, Industrial Chemistry, Mathematics	Sericulture, Zoology, Botany
Biotechnology, Chemistry, Biochemistry	Chemistry, Industrial Chemistry, Botany
Physics, Chemistry, Environmental Science	

11. Every examinee for the B.Sc. Sem-III, IV, V and VI Examination shall be examined in each of the three Science subjects in which he/she has been examined at the B.Sc. Sem-I & II Examination.

12. An examinee who has been successful at the B.Sc. Sem-I & II Examination, may offer an additional subject mentioned in Table 4, not offered by him / her at the B.Sc. Sem-I & II Examination, on his prosecuting a regular course of study for one academic year in that subject. Such an examinee shall not be permitted to take any other examination simultaneously with the examination in the additional subject. The fee for the additional subject shall be as prescribed by the University from time to time.

13. The Scope of the subjects of all semesters of B.Sc. examination shall be as indicated in the respective syllabi in force from time to time. The medium of instruction and examination shall be English, except for the courses in Languages.

14. The maximum marks allotted to each subject and the minimum marks which an examinee must obtain in order to pass the examination shall be as per the Appendix **A** appended to this Direction.

15. The practical examination of all semesters shall be conducted at the end of each semester as indicated in Table 5 given below.

Table 5

S. No	Name of the Examination	Main Examination	Supplementary Examination
1	Semester I, III and V	Winter	Summer
2	Semester II, IV, and VI	Summer	Winter

16. The scheme of awarding internal marks shall be as per Appendix- **B** appended with this Direction.

17. Successful examinees at the B.Sc. Sem-VI Examination who obtained not less than 60% marks (aggregate of Sem-I, II, III, IV, V & VI Examinations taken together, excluding Languages) shall be placed in First Division, those obtaining less than 60% but not less than 45% in Second Division, and all other successful examinees in the Third Division.

Explanation :

Division at the B.Sc. Examination shall be declared on the basis of the marks obtained only in the Science Subjects at the Sem-I, II, III, IV, V & VI Examinations taken together.

18. There shall be no classification of successful examinees at the Sem-I to Sem-V Examinations.

19. An examinee successful in the minimum period prescribed for the examination, obtaining not less than 75% of the maximum marks prescribed in the subject shall be declared to have passed the examination with Distinction in that subject.

Explanation :

(1) Distinction shall be awarded only in the Science Subjects.

(2) Distinction at the B.Sc. Examination shall be awarded on the basis of the marks obtained at the B.Sc. Semester - I, II, III, IV, V and Semester VI Examination taken together.

(3) Distinction shall not be awarded to an examinee availing of the provision of the exemptions and compartments at any of the examination.

20. Provisions of Ordinance No 7-A relating to the Condonation of Deficiency of Marks for passing an examination and compartment as amended up-to-date vide ordinance No. 45 of 1983 shall apply to the examinations under this Direction.

21. (A) The students who have passed B.Sc. Semester VI examination of this University or any other statutory University shall be eligible to seek admission for studying practical of any other optional subjects offered for B.Sc. Degree for simultaneous study of complete three year course for that subject in one year and to appear simultaneously for all parts of examination leading to the degree of Bachelor of Science (additional) in that subject, subject to the following condition. An examinee shall have attended full course of laboratory instructions in a College in the subject in which laboratory work is prescribed. An examinee shall submit a certificate to that effect signed by the Principal of the College.

(B) On securing not less than minimum marks prescribed for the subject / subjects shall be issued a certificate of having passed the examination in the additional subject / subjects as the case may be.

(C) The application for admission to the examination under (A) above shall be submitted to the Registrar not less than three months before the date of commencement of the examination.

22. As soon as possible after the examinations, the Board of Examinations shall publish a list of successful examinees at the B.Sc Sem-I & II; B.Sc. Sem-III & IV and B.Sc. Sem-V & VI Examinations. Such list at the B.Sc. Semester VI Examination shall be arranged in three Divisions. The names of the examinees passing the examination as a whole in the minimum prescribed period and obtaining the prescribed number of places in First or Second Division shall be arranged in Order of Merit as provided in the Examinations in General Ordinance No. 6. While preparing the Merit list for the B. Sc. Examination the marks secured by the candidate in the compulsory languages at their Semester I & II Examination will be taken into consideration in addition to the marks scored by them in their optional subjects.

23. No Person shall be admitted to B.Sc Sem-I, II, III, IV, V and VI Examinations, if he/she has already passed the corresponding or an equivalent examination of any other Statutory University.

24. Successful examinees at the B. Sc. Sem I, II, III, IV, and V Examinations shall be entitled to receive a **Certificate** signed by the **Registrar** and successful examinees at the end of B. Sc. Sem VI examination shall, on payment of prescribed fees, receive a Degree in the prescribed format, signed by the Vice-Chancellor.

25. The provisions of direction no. 3 of 2007 for the award of grace marks for passing an examination, securing higher grade in subject(s) as updated from time to time shall apply to the examination under this direction.

26. Absorption / Matching Scheme:

a. While switching over to semester pattern, the failure students of annual pattern will be given total five (three + two) chances to clear each examination.
   After availing five chances for clearing the examination as per annual pattern, no examination would be held for annual pattern candidates.
b. The candidates who have cleared all the subject heads of first year annual pattern examination shall get admission to third semester directly. However, candidates who are allowed to keep term will not be eligible for admission to third semester unless they clear all the papers / practicals / subject heads of first year annual pattern examination.
c. The candidates who have cleared all the subject heads of second year annual pattern examination shall get admission to fifth semester directly. However, candidates who are allowed to keep term will not be eligible for admission to fifth semester unless they clear all the papers / practicals / subject heads of second year annual pattern examination.
d. For other Statutory University candidates with similar yearly pattern program, point No. 26 ‘b’ and ‘c’ shall be applicable.
e. The scheme of awarding internal marks / practical marks / theory marks / marklist (if any and if required) shall be as per guidelines given in Appendix – C.
f. For other Statutory University candidates with Semester Pattern Bachelor of Science Program – the candidate shall be admitted to the next higher semester provided that Candidate shall have cleared previous semester and R. T. M. Nagpur University Committee constituted from time to time for the purpose shall scrutinize and clear the case on the basis of subject and syllabus contents of his / her previous semester examination of the other Statutory University.
g. **Those students who fail to clear the examination within the available chances (Three + Two) would be bound by absorption / matching scheme as per Appendix – C.**

27. With the issuance of the Direction, the Direction No.2 of 2015 shall stand repealed.

Sd/-
Dr. S. P. Kane
Vice-Chancellor

Nagpur
Date : 2/5/2016

Appendix – A
Teaching & Examination Scheme
Bachelor of Science
Three Year (SIX SEMESTER) DEGREE COURSE

B. Sc. (Semester I and II)

S. No.	Subject	Teaching scheme			Examination scheme								
					Theory					Practical			Total Marks (Th, Pr, IA)
		Th + Tu (Periods)	Pr (Periods)	Total Periods	Duration Hrs	Max Marks Th paper	Max Marks IA	Total	Min Passing Marks	Duration Hrs	Max marks practical	Min passing marks	
1	Compulsory English	4+1	-	4+1	3	60	15	75	30	-	-	-	75
2	Second Language	3	-	3	3	60	15	75	30	-	-	-	75
3	Science subjects excluding Maths (Paper I)	3+ @	-	6+ @	3	50	10	120	48	-	-	-	150
4	Science subjects excluding Maths (Paper II)	3+ @	-		3	50	10			-	-	-	
5	Science subjects excluding Maths (Practical)	-	6	6	-	-	-	-	-	6-8*	30	12	
6	Mathematics (Paper I)	4+1	-	8+2	3	60	15	150	60	-	-	-	150
7	Mathematics (Paper II)	4+1	-		3	60	15			-	-	-	

Note:

1. Th = Theory; Pr = Practical; Tu = Tutorial; IA = Internal Assessment; @ = Tutorials wherever applicable; * = If required, for two days.
2. Minimum marks for passing will be 40% of the total marks allotted to that paper / practical.
3. Candidate has to pass theory papers and practical separately

Point no. 6 & 7 in the above table is applicable only to students offering Mathematics as one of the subjects.

Grand Total of Semester I & II: 450 + 150 each semester = TOTAL – 600 Marks per semester

Contd.

Teaching & Examination Scheme
Bachelor of Science
Three Year (SIX SEMESTER) DEGREE COURSE

B. Sc. (Semester III; IV, V and VI)

S. No.	Subject	Teaching scheme			Examination scheme								
					Theory					Practical			Total Marks (Th, Pr, IA)
		Th + Tu (Periods)	Pr (Periods)	Total Periods	Duration Hrs	Max Marks Th paper	Max Marks IA	Total	Min Passing Marks	Duration Hrs	Max marks practical	Min passing marks	
1	Science subjects excluding Maths (Paper I)	3+ @	-	6+ @	3	50	10	120	48	-	-	-	150
2	Science subjects excluding Maths (Paper II)	3+ @	-		3	50	10			-	-	-	
3	Science subjects excluding Maths (Practical)	-	6	6	-	-	-	-	-	6-8*	30	12	
4	Mathematics (Paper I)	4+1	-	8+2	3	60	15	150	60	-	-	-	150
5	Mathematics (Paper II)	4+1	-		3	60	15			-	-	-	

Note:

1. Th = Theory; Pr = Practical; Tu = Tutorial; IA = Internal Assessment; @ = Tutorials wherever applicable; * = If required, for two days.
2. Minimum marks for passing will be 40% of the total marks allotted to that paper / practical.
3. Candidate has to pass theory papers and practical separately

Point no. 4 & 5 in the above table is applicable only to students offering Mathematics as one of the subjects.

Grand Total of Semester III, IV, V & VI: 450 each semester = TOTAL - 450 Marks per semester

Appendix - B:

Guidelines for Internal Assessment, Theory paper pattern and Practical

1. Each semester shall comprise of minimum 90 teaching days.
2. Every subject (Except Languages and Mathematics) in each semester will comprise
    a. Two theory papers – 50 Marks each
    b. One internal assessment based on the two theory papers for 10 Marks each. Total 20 Marks.
    c. One practical / laboratory work – Total 30 marks
3. For Mathematics
    a. Two theory papers – 60 marks each
    b. One internal assessment based on the two theory papers for 15 marks each. Total 30 marks
4. In addition to the above, Semester I and II will have
    a. One compulsory English paper of 60 marks with 15 marks internal assessment, Total 75 marks.
    b. One second language paper (Marathi, Hindi, Urdu, Supplementary English, Gujarati, Bengali, Telugu, Sanskrit, French, German, Russian, Persian, Arabic, Pali and Prakrit or Latin) of 60 Marks with 15 marks internal assessment, Total 75 marks.

Internal Assessment:

5. The internal assessment shall be done by the College at least 15 days prior to the final examination of each semester. The Marks shall be sent to the University immediately after the Assessment in the prescribed format.
6. Guidelines for Internal Assessment are appended herewith.

    a) The internal assessment marks assigned to each theory paper as mentioned in Appendix - A shall be awarded on the basis of assignments like class test, attendance, project assignments, seminar, study tour, industrial visits, visit to educational institutions and research organizations, field work, group discussions or any other innovative practice / activity.

    b) There shall be one / two assignments (as described above) per Theory paper.

    c) There shall be no separate / extra allotment of work load to the teacher concerned. He/ She shall conduct the Internal assessment activity during the regular teaching days / periods as a part of regular teaching activity.

    d) The concerned teacher / department / college shall have to keep the record of all the above activities until six months after the declaration of the results of that semester.

    e) At the beginning of each semester, every teacher shall inform his / her students unambiguously the method he / she proposes to adopt and the scheme of marking for internal assessment.

    f) Teacher shall announce the schedule of activity for internal assessment in advance in consultation with HOD / Principal.

    g) Final submission of internal marks to the University shall be before the commencement of the University Theory Examinations.

Theory Papers:

7. All Theory papers shall be divided into four units.
8. The theory question papers shall be of 3 hours duration and comprise of 5 questions with equal weightage to all units.
9. The pattern of question papers is appended herewith.
    - Each theory paper will be of 50 marks (60 marks for Mathematics and Languages) each.
    - All questions are compulsory and will carry equal marks.
    - Question paper for any theory paper will comprise of five questions of 10 marks (12 marks for Mathematics and Languages) each.
    - Question No. 1 to 4 will be will be from four units each with an internal choice. The questions can be asked in the form of long answer type for 10 marks (12 Marks for Mathematics and Languages) or two questions / short notes of 5 marks each (6 Marks for Mathematics and Languages) or four questions / short notes of 2½ each (3 Marks for Mathematics and Languages).

- Question No. 5 shall be compulsory with three questions / notes of very short answer type from each of the four units having 1 mark each. The student shall have an option of answering any 10 questions out of the 12 questions. In case of Mathematics and Languages, question 5 shall be compulsory with two questions / notes of very short answer type from each unit having 1½ mark each. The student shall answer all the 8 questions.

Practical:

10. Practical exam shall be of 6 to 8 hours duration for one or two days, depending on subject and number of students.
11. The Practical Record of every student shall carry a certificate as shown below, duly signed by the teacher-in-charge and the Head of the Department.
12. If the student fails to submit his / her certified Practical Record duly signed by the Teacher-In-Charge and the Head of the Department, he / she shall not be allowed to appear for the Practical Examination and no Marks shall be allotted to the student.
13. The certificate template shall be as follows:

C E R T I F I C A T E

Name of the college / institution _

Name of the Department: _

This is to certify that this Practical Record contains the bonafide record of the Practical work of Shri / Kumari / Shrimati _ of _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ Semester _ _ _ _ _ _ _ _ _ during the academic year _ _ _ _ _ _ _. The candidate has satisfactorily completed the experiments prescribed by Rashtrasant Tukdoji Maharaj Nagpur University for the subject _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

Dated _ _ _ / _ _ _ / _ _ _ _ _

Signature of the teacher who taught the examinee

1. _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
2. _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

Head of the Department

Appendix – C:

1. While switching over to semester pattern, the failure students of annual pattern will be given total five (three plus two) chances to clear each examination.
2. Student has to clear the corresponding semesters from the new syllabus if Candidate does not clear Part I, Part II and Part III from the Annual Pattern (Old Course) in total of five (Three + Two) chances given in Annual Pattern Old Course. Example cases are given in table (Point No 11 of the Appendix C).
3. While switching over from Annual Pattern (Old Course) to Semester Pattern Course, the candidate shall submit his original marklist of Annual Pattern (Old Course) to the R. T. M. Nagpur University for issuance of new marklist of Semester Pattern Course.
4. As per requirement and if necessary, while switching over from Annual Pattern (Old Course) to Semester Pattern Course, the University shall issue Semester Pattern Course marklist in proportion of marks obtained in the Annual Pattern (Old Course).
5. As soon as the candidate enters in the Semester Pattern Course from the Annual Pattern (Old Course) as per the given absorption / matching scheme and successfully completes the course in the Semester Pattern Course, the University shall award revised marklist as per the Semester Pattern Course for a particular semester.
6. In case of any difference in minimum passing marks in the Annual Pattern (Old Course) AND in the Semester Pattern Course, the University shall convert marks proportionately for issuance of marklist in the Semester Pattern Course.
7. If the candidate has cleared theory papers in the concerned subject in the Annual Pattern (Old Course) [Part I / II / III] – Candidate shall be awarded marks in theory papers and internals marks proportionately in the Semester Pattern Course [Semester I, II / III, IV / V, VI].
8. If the Candidate has failed in the theory papers of any subject of the Annual Pattern (Old Course), then the candidate has to appear for theory papers in that subject for both the concerned semesters (Ex. Part I – concerned semesters are Semester I & II). Proportionate internal marks shall be awarded on the basis of marks obtained in the theory papers of semester pattern course in that subject.
9. If the candidate has cleared practical head in the concerned subject in the Annual Pattern (Old Course), the candidate shall be awarded proportionate marks in the Semester Pattern Course.
10. If the Candidate has failed in the practical head of any subject of the Annual Pattern (Old Course), then the candidate has to appear for the practical head in that subject for both the concerned semesters (Ex. Part I – concerned semesters are Semester I & II). Marks shall be awarded on the basis of marks obtained in the practical head of semester pattern course in that subject.
11. **Example cases:**

Old course (Annual Pattern)	**Semester Pattern Course**
If the candidate has cleared all subject heads of part I / part II in the annual pattern (Old Course)	1. The candidate shall be eligible to take admission in semester III / semester V of the semester pattern course.
If the candidate is declared fail in English and zoology (Th / Pract) heads in Part I of the annual pattern after total of five (three + two)	1. Candidate shall appear as an external student for the semester I and II English and Zoology theory papers in the semester pattern. 2. If the candidate has failed in practical head in the annual pattern, the university shall conduct practical examinations for Semester I and II and candidate shall appear for the same as an external candidate to clear practical head in the semester pattern. 3. Once the candidate clears the subjects in the semester pattern, Candidate shall be eligible to take fresh admission to semester III of the semester pattern course. 4. Candidate shall submit his original marklists of annual pattern course to the

chances in the old pattern.	University for Issuance of mark list of semester pattern course. 5. University shall award internal marks in proportion to marks obtained in theory papers. 6. University shall award practical marks (if applicable) in proportion to marks obtained in the annual pattern zoology practical if Candidate has passed.
If the candidate is declared fail in English and zoology (Th / Pract) heads in Part II of the annual pattern after total of five (three + two) chances in the old pattern.	1. Candidate shall appear as an external student for the semester III and IV English and Zoology theory papers in the semester pattern. 2. If the candidate has failed in practical head, the university shall conduct practical examinations for Semester III and IV and candidate shall appear for the same as an external candidate to clear practical head in the semester pattern. 3. Once the candidate clears the subjects in the semester pattern, Candidate shall be eligible to take fresh admission to semester V of the semester pattern course. 4. Candidate shall submit his original mark lists of annual pattern course to the University for Issuance of mark list of semester pattern course. 5. University shall award internal marks in proportion to marks obtained in theory papers. 6. University shall award practical marks (if applicable) in proportion to marks obtained in the annual pattern zoology practical if Candidate has passed
If the candidate is declared fail in English and zoology(Th / Pract) heads in Part III of the annual pattern after total of five (three + two) chances in the old pattern.	1. Candidate shall appear as an external student for the semester V and VI English and Zoology theory papers in the semester pattern. 2. If the candidate has failed in practical head, the university shall conduct practical examinations for Semester V and VI and candidate shall appear for the same as an external candidate to clear practical head in the semester pattern. 3. Once the candidate clears the subjects in the semester pattern, Candidate shall be eligible to get semester pattern degree from the University. 4. Candidate shall submit his original mark lists of annual pattern course to the University for Issuance of mark list of semester pattern course. 5. University shall award internal marks in proportion to marks obtained in theory papers. 6. University shall award practical marks (if applicable) in proportion to marks obtained in the annual pattern zoology practical if Candidate has passed.
If the candidate is declared fail in Maths and Zoology (Th / Pract) heads in Part I but cleared all the heads of part II of the annual pattern after total of five (three + two) chances in the old pattern.	1. Candidate shall appear as an external student for the semester I and II Maths and Zoology theory papers in the semester pattern. 2. If the candidate has failed in practical head, the university shall conduct practical examinations for Semester I and II and candidate shall appear for the same as an external candidate to clear practical head in the semester pattern. 3. Once the candidate clears the subjects in the semester pattern, Candidate shall be eligible to take fresh admission to semester V of the semester pattern course. 4. Candidate shall submit his original mark lists of annual pattern course to the University for Issuance of mark list of semester pattern course. 5. University shall award internal marks in proportion to marks obtained in theory papers. 6. University shall award practical marks (if applicable) in proportion to marks obtained in the annual pattern zoology practical if Candidate has passed.
If the candidate is declared fail in Hindi and Zoology (Th / Pract) in Part II but cleared Part I of the annual pattern after total of five (three +	1. Candidate shall appear as an external student for the semester III and IV Hindi and Zoology theory papers in the semester pattern. 2. If the candidate has failed in practical head, the university shall conduct practical examinations for Semester III and IV and candidate shall appear for the same as an external candidate to clear practical head in the semester pattern. 3. Candidate is also eligible to take fresh admission to semester V of the semester pattern course. 4. However, Candidate shall clear semester III and IV Hindi and Zoology theory papers and practicals (if applicable) in the semester pattern before the candidate is

two) chances in the old pattern.	awarded with degree in semester pattern course. 5. Candidate shall submit his original mark lists of annual pattern course to the University for Issuance of mark list of semester pattern course. 6. University shall award internal marks in proportion to marks obtained in theory papers. 7. University shall award practical marks (if applicable) in proportion to marks obtained in the annual pattern zoology practical if Candidate has passed.

RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY

"(Established by Government of Central Provinces Education Department by Notification No. 513 dated the 1st of August, 1923 & presently a State University governed by Maharashtra Public Universities Act, 2016 (Mah. Act No. VI of 2017).)"

DIRECTION NO. 39 OF 2023

ADMISSIONS AND EXAMINATIONS LEADING TO THE AWARD OF THE CERTIFICATE, DIPLOMA OR DEGREE OF BACHELOR OF COMMERCE (B.Com.) (OUTCOME BASED) (CHOICE BASED CREDIT SYSTEM), DIRECTION, 2023

Whereas, Maharashtra Public Universities Act 2016(VI of 2017) (hereinafter the Act) has come into force from 1st March, 2017;

AND

Whereas, the University has issued Direction to 27 of 2022 dealing with composition of the four faculties created by the Act, where under the earlier different faculties of the University have been merged into the four new faculties created by the Act, by which the subject of Business Administration has been included in the faculty of Commerce and Management;

AND

WHEREAS Direction No. 17 of 2018 entitled "DIRECTION GOVERNING THE EXAMINATION LEADING TO THE DEGREE OF Bachelor of Commerce (B.Com) (CHOICE BASED CREDIT SYSTEM) (FACULTY OF COMMERCE AND MANAGEMENT), was issued by the Vice-Chancellor on 18.9.2018 ;

AND

Whereas, MHRD, New Delhi & UGC issued the guidelines for implementation of NEP 2020 in all universities in UG & PG programs from academic session 2022-23. So it was necessary to restructure the complete scheme of examination incorporating curriculum features as mentioned in NEP 2020;

AND

Whereas, the Faculty of Commerce and Management in its meeting dated 24.6.22 has recommended to restructure the B.Com program so as to meet the expectations of new National Education Policy 2020, the said program is to commence from academic year 2022-23, it was also resolve to empower the Hon'ble Vice Chancellor to accept the scheme once prepared and accepted by the Board of Studies for Commerce, on behalf of the Faculty of Commerce and Management;

AND

Whereas, the Academic Council in its meeting held on 8.7. 2022 vide item No. 24 has considered, accepted the recommendation of Faculty of Commerce and Management whereby authorized the Vice Chancellor to accept the Scheme of Examination and syllabi prepared by the Board of Studies in Commerce for the programme of Bachelor of Commerce in order to give effect to the provisions of National Education Policy 2020;

AND

Whereas, the Board of Studies in its meeting dated 13.7.22 has accepted the detailed scheme of examination and syllabus for the Bachelor of Commerce with the option of award of Certificate and Diploma in between if the student so desires, as per the new National education Policy as prepared by the sub-committee with minor changes, the said programme is to commence from academic year 2022-23;

AND

Whereas, the Vice Chancellor has granted approval to the scheme of examination so prepared and accepted by the Board of Studies on behalf of the Faculty of Commerce and Management and the Academic Council as resolved by the Faculty of Commerce and Management and the Academic Council in their meetings dated 24.6.22 and 8.7.22 respectively;

AND

Whereas, Direction No. 42 of 2022 entitled "ADMISSIONS AND EXAMINATIONS LEADING TO THE AWARD OF THE CERTIFICATE, DIPLOMA OR DEGREE OF BACHELOR OF COMMERCE (B.Com.) (OUTCOME BASED) (CHOICE BASED CREDIT SYSTEM), DIRECTION, 2022", has lapsed by virtue of proviso to subsection (8) of section 12 of the Act as the said Direction could not be converted in to an Ordinance within the prescribed time and since Ordinance making is a time consuming process and there is an urgency to regularized the admissions and examinations of BACHELOR OF COMMERCE (B.Com.) (OUTCOME

BASED)(CHOICE BASED CREDIT SYSTEM) incorporating the provisions of the Direction since lapsed;

Now, therefore, I, Dr. Subhash R. Chaudhari, Vice-Chancellor Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur, in exercise of powers conferred upon me under provision of section 12(8) of the Maharashtra Public Universities Act, 2016, do hereby issue following Directions.

1. This Direction may be called **'ADMISSIONS AND EXAMINATIONS LEADING TO THE AWARD OF THE CERTIFICATE, DIPLOMA OR DEGREE OF BACHELOR OF COMMERCE (B.Com.) (OUTCOME BASED) (CHOICE BASED CREDIT SYSTEM), DIRECTION, 2023.**

2. This Direction shall come into force from the date of its issuance.

3. **INTERPRETATION CLAUSE:** In this Direction, unless the context requires otherwise the words, phrases and abbreviations used shall have following meaning:-
   a. **"AEC"** means the Ability Enhancement Course
   b. **"Academic Council"** means Academic Council of R.T.M. Nagpur University.
   c. **"ATKT"** refers to allowed to keep term in higher semester.
   d. **"Board of Studies"** means Board of Studies for various subjects of commerce in the faculty of Commerce and Management in the University.
   e. **"CC"** means Core Course
   f. **"CIE"** means Continuous Internal Evaluation which refers to the Internal Assessment done at concerned college
   g. **"Competent Authority"** (for admission purpose) means an "Authority" established or assigned the duty to regulate admissions in the course by the Government of Maharashtra or an authority constituted by the University, for this purpose.
   h. **"Credit Points"** refer to the product of No. of credits multiplied by the Grade Point for a given course/paper.
   i. **"Credit"** (C) for a course is dependent on the number of hours of instruction per week in that course, and is obtained by using a multiplier of one (1) for lecture and a multiplier of half (1/2) for practical (laboratory) hours.
   j. **"Course"** means a paper/subject (theory or practical) prescribed for any semester of the programme.

k. **"Cumulative Grade Point Average (CGPA)"** refers to the Cumulative Grade Point Average weighted across all semesters (6 semesters)

l. **"DSE"** means Discipline Specific Elective Course

m. **"Degree"** means the Under Graduate Degree awarded after successful completion of the programme governed by this Direction.

n. **"Fees"** means the fees prescribed by the University Shikshan Shulka Samiti of Government of Maharashtra, for the Under Graduate programme under this Direction, from time to time.

o. **"GE"** means Generic Elective Course

p. **"Grade letter"** is an index to indicate the performance of a student in a particular course (Paper). It is the transformation of actual marks secured by a student in a course/paper. Grade letters are O, A, B, C, P, F and AB.

q. **"Grade Point"** is the weightage allotted to each grade letter depending on the range of marks awarded in a course/paper.

r. **"Graduate programme"** means Bachelors' degree programme in Commerce.

s. **"MOOC"** means Massive Open Online Course offered by SWAYAM/NPTEL or any other recognized University or Institution

t. **"SEC"** means Skill Enhancement Course

u. **"Semester Grade Point Average (SGPA)"** refers to the performance of the student in a given semester. SGPA is based on the total credit points earned by the student in all the courses and the total number of credits assigned to the courses/papers in a Semester.

v. **"Student"** means student admitted to Bachelors degree programme in commerce under this direction.

w. **"ODL"** means Online and Distance Learning

x. **"University"** means Rashtrasant Tukadoji Maharaj Nagpur University

4. There shall be Six Examinations leading to the degree of Bachelor of Commerce (B.Com.) namely:

(1) The **Bachelor of Commerce (B.Com.)** – 1st Semester Examination.
(2) The **Bachelor of Commerce (B.Com.)** – 2nd Semester Examination.
(3) The **Bachelor of Commerce (B.Com.)** – 3rd Semester Examination.
(4) The **Bachelor of Commerce (B.Com.)** – 4th Semester Examination.

(5) The **Bachelor of Commerce (B.Com.)** – 5th Semester Examination and
(6) The **Bachelor of Commerce (B.Com.)** – 6th Semester Examination.

5. The duration of the Degree Course under this shall be of three academic years divided into six semesters with the B.Com. 1st and 2nd Semester Examinations during the first academic year, the B.Com. 3rd and 4th Semester Examinations during the second year and the B.Com. 5th and 6th Semester Examinations during the third year.

6. The examinations specified in paragraph 4 above shall be held twice a year at such places and on such dates as may be fixed by the University.

7. The details of eligibility for **B.Com. Sem I** examination:

(A) For the **B.Com. 1st Semester,** Examinee shall have Passed the 12th Standard Examination of the Maharashtra State Board of Secondary and Higher Secondary Education, with English at Higher or Lower level and any Modern Indian Language at higher or lower level with any combination of optional subjects.

OR

XII Standard Examination of Maharashtra State Board of Secondary and Higher Secondary Education in Vocational Stream with one language only; OR any other examination recognized as equivalent thereto; in such subjects and with such standards of attainments as may be prescribed Minimum Competition vocation course (MCVC).

OR

Any other Equivalent Examination of any State/Central/International Board in (10+2) pattern with any combination of subjects.

8. A collegiate candidate shall have pursued a regular course of study for not less than 90 days of the academic session before being examined for any semester examination of **B.Com.** in any recognized institution and or college affiliated to Rashtrasant Tukadoji Maharaj Nagpur University where the course is conducted.

9. An applicant for the Bachelor of Commerce 1st, 2nd, 3rd, 4th, 5th or 6th Semester Examination shall have passed an examination specified in Clauses (A) of paragraph 7 not less than one academic year prior to his admission to the respective examination.

10. Without prejudice to the other provisions of Ordinance No. 6 relating to the Examinations in General, the provisions of Paragraphs 5, 7, 8, 10, 26 and 31 of the said Ordinance shall apply to every collegiate candidate.

11. The fees for the examination shall be as prescribed by the University from time to time and whenever any change is made in the fees prescribed for any examination that shall be notified through a notification for information of the examinees concerned.

12. Teaching and Examination Scheme for examinees of Bachelor of Commerce 1st, 2nd, 3rd, 4th, 5th and 6th Semester Examinations shall be as given below:

Teaching and Examination Scheme
Bachelor of Commerce (B.Com.)
Three Year Degree Course (OB) (CBCS)
With effect from 2023-24

(A)
Bachelor of Commerce (B.Com.)
B.Com. – Semester I

Sr. No.	Course Type	Subjects	Course Code	Teaching Scheme	Examination Scheme				Total Marks	Credits
				Total Periods per Week	Max. Marks (TH) *	Max. Marks (CIE)	Total Marks	Min. Passing Marks		
1	CC 1	Fundamentals of Accounting	1T1	5	80	20	100	40	100	4
2	CC 2	Business Economics - I	1T2	5	80	20	100	40	100	4
3	CC 3	Compulsory English	1T3	5	80	20	100	40	100	4
4	CC 4	Second language Supplementary English/ Marathi/ Hindi/ Other Languages # **OR** Vocational Course	1T4.1 1T4.2 1T4.3	5	80	20	100	40	100	4
5	AEC 1	Commercial Firms **OR** Digital Marketing (Any One) **OR** Vocational Course	1T5-A 1T5-B	5	80	20	100	40	100	4

6	SEC 1	Business Skills **OR** MS-Office (Any One)	1T6-A 1P6-B	5 10	-- --	100 100	100 100	40 50	100 100	4 4
		Total		**30**	**400**	**200**	**600**	**240/250**	**600**	**24**

* Semester end examination

Note:

1. The duration of each theory class should be a minimum of 48 minutes.
2. TH = Theory, IM = Internal Marks.
3. One credit is equivalent to one hour of Teaching per week, that is to say, for each subject, 48 Minutes * 5 (weekly periods) = 240 Minutes = 4 Hours per week i.e. 4 Credits.
4. Each semester will consist of at least 15 weeks of Academic Work equivalent to 90 actual teaching days.
5. **. In case of practical courses the total periods per week should be 10.**
6. For Semesters I, II, III & IV, students shall opt for one subject from Ability Enhancement Courses (AEC) and one subject from Skill Enhancement Courses (SEC). The Core Courses will remain compulsory
7. The syllabus and question paper pattern of Second Language subject of B. Com. Semester, I, II, III & IV i.e. a) Supplementary English b) Marathi c) Hindi will be as per the Commerce Language Board.
8. # The syllabus and question paper pattern of other second languages like Sanskrit, Urdu, Guajrati, Telegu, Bengali, Persian, Arabic, Pali & Prakrit and Latin will be as per the Boards of the faculty of Arts for B.A. Semester-I, II, III & IV respectively

Vocational Courses: Semester -I

Course Code	Subjects	Total Hours	Examination Scheme				Total Marks (TH. +PR +IM)	Credits
			Theory (Uni)	CIE (College)	Practical (Uni)			
			Marks Theory Paper	Max Marks (IM)	Marks Practical (PR)	Min Passing Marks		
1T7	Entrepreneurship Development -I	60	80	20	-	40	100	4

1T8	1T8.1- Computer Application-I **OR** 1T8.2- Principles and Practice of Insurance-I **OR** 1T8.3- Advertising, Sales Promotion & Sales Management-I	60	80	20	-	40	100	4

(B)
B.Com. – Semester - II

Sr. No.	Course Type	Course/Subject Name	Course Code	Teaching Scheme	Examination Scheme				Total Marks	Credits
				Total Periods per Week	Max. Marks (TH)*	Max. Marks (CIE)	Total Marks	Min. Passing Marks		
1	CC 5	Statistics and Business Mathematics	2T1	5	80	20	100	40	100	4
2	CC 6	Business Economics - II	2T2	5	80	20	100	40	100	4
3	CC 7	Compulsory English	2T3	5	80	20	100	40	100	4
4	CC 8	Second language Supplementary English/ Marathi/ Hindi/ Other Languages # **OR** Vocational Course	2T4.1 2T4.2 2T4.3	5	80	20	100	40	100	4

5	AEC 2	Commercial Services **OR** Fundamentals of Banking (Any One) **OR** Vocational Course	2T5-A 2T5-B	5	80	20	100	40	100	4
6	SEC 2	Financial Markets Operations **OR** Skill Development (Any one)	2T6-A 2T6-B	5	80	20	100	40	100	4
		Total		**30**	**480**	**120**	**600**	**240**	**600**	**24**

* Semester end examination

Note:

1. The duration of each theory class should be a minimum of 48 minutes.
2. TH = Theory, IM = Internal Marks.
3. One credit is equivalent to one hour of Teaching per week, that is to say, for each subject, 48 Minutes * 5 (weekly periods) = 240 Minutes = 4 Hours per week i.e. 4 Credits.
4. Each semester will consist of at least 15 weeks of Academic Work equivalent to 90 actual teaching days.
5. **. In case of practical courses the total periods per week should be 10.**
6. For Semesters I, II, III & IV, students shall opt for one subject from Ability Enhancement Courses (AEC) and one subject from Skill Enhancement Courses (SEC). The Core Courses will remain compulsory.
7. The syllabus and question paper pattern of Second Language subject of B. Com. Semester- I, II, III & IV i.e. a) Supplementary English b) Marathi c) Hindi will be as per the Commerce Language Board.
8. # The syllabus and question paper pattern of other second languages like Sanskrit, Urdu, Gujrati, Telegu, Bengali, Persian, Arabic, Pali & Prakrit and Latin will be as per the Boards of the faculty of Arts for B.A. Semester- I, II, III & IV respectively

Vocational Courses: Semester -II

Course Code	Subjects	Total Hours	Examination Scheme					Total Marks (TH. +PR +IM)	Credits
			Theory (Uni)	CIE (College)	Practical (Uni)				
			Marks Theory Paper	Max Marks (IM)	Marks Practical (PR)	Min Passing Marks			
2T7	Entrepreneurship Development – II	60	80	20	-	40		100	4
2T8	2T8.1- Computer Application-II **OR** 2T8.2- Principles and Practice of Insurance-II **OR** 2T8.3- Advertising, Sales Promotion & Sales Management-II	60	80	20	-	40		100	4

(C)
B.Com. – Semester - III

Sr. No.	Course Type	Course/Subject Name	Course Code	Teaching Scheme	Examination Scheme				Total Marks	Credits
				Total Periods per Week	Max. Marks (TH)*	Max. Marks (CIE)	Total Marks	Min. Passing Marks		
1	CC 9	Financial Accounting – I	3T1	5	80	20	100	40	100	4
2	CC 10	Monetary Economics - I	3T2	5	80	20	100	40	100	4
3	CC 11	Compulsory English	3T3	5	80	20	100	40	100	4
4	CC 12	Second language Supplementary English/ Marathi/ Hindi/ Other Languages # **OR** Vocational Course	3T4.1 3T4.2 3T4.3	5	80	20	100	40	100	4
5	AEC 3	Company Law **OR** Income Tax (Any One) **OR** Vocational Course	3T5-A 3T4-B	5	80	20	100	40	100	4
6	SEC 3	Holistic Development **OR** Computerized Accounting (Any One)	3T6-A 3P6-B	5 10	-- --	100 100	100 100	40 50	100 100	4
		Total		**30**	**400**	**200**	**600**	**240/250**	**600**	**24**

* Semester end examination

Note:

1. The duration of each theory class should be a minimum of 48 minutes.
2. TH = Theory, IM = Internal Marks.
3. One credit is equivalent to one hour of Teaching per week, that is to say, for each subject, 48 Minutes * 5 (weekly periods) = 240 Minutes = 4 Hours per week i.e. 4 Credits.
4. Each semester will consist of at least 15 weeks of Academic Work equivalent to 90 actual teaching days.
5. **In case of practical courses the total periods per week should be 10.**
6. For Semesters I, II, III & IV, students shall opt for one subject from Ability Enhancement Courses (AEC) and one subject from Skill Enhancement Courses (SEC). The Core Courses will remain compulsory.
7. The syllabus and question paper pattern of Second Language subject of B. Com. Semester: I, II, III & IV i.e. a) Supplementary English b) Marathi c) Hindi will be as per the Commerce Language Board.
8. # The syllabus andquestion paper pattern of other second languages like Sanskrit, Urdu, Guajrati, Telegu, Bengali, Persian, Arabic, Pali & Prakrit and Latin will be as per the Boards of the faculty of Arts for B.A. Semester- I, II, III & IV respectively

Vocational Courses: Semester - III

Course Code	Subjects	Total Hours	Examination Scheme					Credits
			Theory (Uni)	CIE (College)	Practical (Uni)		Total Marks (TH. + PR + IM)	
			Max Marks Theory Paper (TH)	Marks (IM)	Max Marks Practical (PR)	Min Passing Marks		
3T7	Entrepreneurship Development- III	60	80	20	-	40	100	4
3T8	3T8.1- Computer Application-III **OR** 3T8.2- Principles and Practice of Insurance-III **OR** 3T8.3- Advertising, Sales Promotion & Sales Management-III	60	80	20	-	40	100	4

(D)
B.Com. – Semester – IV

Sr. No.	Course Type	Course/Subject Name	Course Code	Teaching Scheme	Examination Scheme				Total Marks	Credits
				Total Periods per Week	Max. Marks (TH)*	Max. Marks (CIE)	Total Marks	Min. Passing Marks		
1	CC 13	Financial Accounting - II	4T1	5	80	20	100	40	100	4
2	CC 14	Monetary Economics – II	4T2	5	80	20	100	40	100	4
3	CC 15	Compulsory English	4T3	5	80	20	100	40	100	4
4	CC 16	Second language Supplementary English/ Marathi/ Hindi/ Other Languages # **OR** Vocational Course	4T4.1 4T4.2 4T4.3	5	80	20	100	40	100	4
5	AEC 4	Organizational Behaviour **OR** Banking Procedure & Practice (Any One) **OR** Vocational Course	4T5-A 4T5-B	5	80	20	100	40	100	4
6	SEC – 4	Secretarial Practice **OR** Insurance Procedure & Practice (Any One)	4T6-A 4T6-B	5	80	20	100	40	100	4
		Total		**30**	**480**	**120**	**600**	**240**	**600**	**24**

* Semester end examination

Note:

1. The duration of each theory class should be a minimum of 48 minutes.
2. TH = Theory, IM = Internal Marks.
3. One credit is equivalent to one hour of Teaching per week, that is to say, for each subject, 48 Minutes * 5 (weekly periods) = 240 Minutes = 4 Hours per week i.e. 4 Credits.
4. Each semester will consist of at least 15 weeks of Academic Work equivalent to 90 actual teaching days.
5. **In case of practical courses the total periods per week should be 10.**
6. For Semesters I, II, III & IV, students shall opt for one subject from Ability Enhancement Courses (AEC) and one subject from Skill Enhancement Courses (SEC). The Core Courses will remain compulsory.
7. The syllabus and question paper pattern of Second Language subject of B. Com. Semester: I, II, III & IV i.e. a) Supplementary English b) Marathi c) Hindi will be as per the Commerce Language Board.
8. # The syllabus and question paper pattern of other second languages like Sanskrit, Urdu, Guajrati, Telegu, Bengali, Persian, Arabic, Pali & Prakrit and Latin will be as per the Boards of the faculty of Arts for B.A. Semester- I, II, III & IV respectively

Vocational Courses :Semester-IV

Course Code	Subjects	Total Hours	Examination Scheme				Total Marks (TH. + PR + IM)	Credits
			Theory (Uni)	CIE (College)	Practical (Uni)			
			Max Marks Paper Theory (TH)	Max Marks (IM)	Max Marks Practical (PR)	Min Passing Marks		
417	Entrepreneurship Development-IV	60	80	20	-	40	100	4

4T8	4T8.1- Computer Application-IV **OR** 4T8.2- Principles and Practice of Insurance-IV **OR** 4T8.3- Advertising, Sales Promotion and Sales Management-IV	60	80	20	-	40	100	4

(E)
B.Com. – Semester - V

Sr. No.	Course Type	Course/Subject Name	Course Code	Teaching Scheme	Examination Scheme				Total Marks	Credits
				Total Periods per Week	Max. Marks (TH)	Max. Marks (CIE)	Total Marks	Min. Passing Marks		
1	CC 17	Financial Accounting - III	5T1	5	80	20	100	40	100	4
2	CC 18	Tax Procedure and Practice	5T2	5	80	20	100	40	100	4
3	CC 19	Human Resource Management	5T3	5	80	20	100	40	100	4
4	CC 20	Agricultural Economics	5T4	5	100	20	100	40	100	4
5	DSE 1	Cost Accounting **OR** Commercial Psychology **OR** Mercantile Law I **OR** Business Entrepreneurship Development **OR** Vocational Course	5T5-A 5T5-B 5T5-C 5T5-D	5	80	20	100	40	100	4
6	SEC 5	Company Audit **OR** Internship # **OR** Vocational Course	5T6-A 5I6-B	5 --	80 --	20 100 #	100 100 #	40 40 #	100 100 #	4 4 #
		Total		**30**	**480**	**120**	**600**	**240**	**600**	**24**

* Semester end examination

Note:

1. The duration of each theory class should be a minimum of 48 minutes.
2. TH = Theory, IM = Internal Marks.
3. One credit is equivalent to one hour of Teaching per week, that is to say, for each subject, 48 Minutes * 5 (weekly periods) = 240 Minutes = 4 Hours per week i.e. 4 Credits.
4. Each semester will consist of 15 to 18 weeks of Academic Work equivalent to 90 actual teaching days.
5. **In case of practical courses the total periods per week should be 10.**
6. For Semester V & VI, students have to opt for one subject from Discipline Specific Electives (DSE). The Core Courses will remain compulsory.

Vocational Courses: Semester-V

Course Code	Subjects	Total Hours	Examination Scheme				Total Marks (TH + PR + IM)	Credits
			Theory (Uni)	CIE (College)	Practical (Uni)			
			Max Marks Theory Paper (TH)	Max Marks (IM)	Max Marks Practical (PR)	Min Passing Marks		
5T7	Entrepreneurship Development – V	60	80	20	-	40	100	4
5T8	5T8.1 Computer Application-V **OR** 5T8.2 Principles and Practice of Insurance-V **OR** 5T8.3 Advertising, Sales Promotion and Sales Management-V	60	80	20	-	40	100	4

(F)
B.Com. – Semester - VI

Sr. No.	Course Type	Course/Subject Name	Course Code	Teaching Scheme	Examination Scheme				Total Marks	Credits
				Total Periods per Week	Max. Marks (TH)	Max. Marks (CIE)	Total Marks	Min. Passing Marks		
1	CC 21	Financial Accounting – IV	6T1	5	80	20	100	40	100	4
2	CC 22	International Economics	6T2	5	80	20	100	40	100	4
3	CC 23	Advanced Statistics	6T3	5	80	20	100	40	100	4
4	CC 24	Financial Management	6T4	5	80	20	100	40	100	4
5	DSE 2	Managerial Accounting **OR** Hospitality and Health Care Management **OR** Mercantile Law II **OR** Commercial Geography in Vidarbha Region (Any One) **OR** Vocational Course	6T5-A 6T5-B 6T5-C 6T5-D	5	80	20	100	40	100	4
6	SEC 6	Marketing Process **OR** Advertising Skills **OR** Vocational Course	6T6-A 6T6-B	5	80	20	100	40	100	4

			Total	**30**	**480**	**120**	**600**	**240**	**600**	**24**

* Semester end examination

Note:

1. The duration of each theory class should be a minimum of 48 minutes.
2. TH = Theory, IM = Internal Marks.
3. One credit is equivalent to one hour of Teaching per week, that is to say, for each subject, 48 Minutes * 5 (weekly periods) = 240 Minutes = 4 Hours per week i.e. 4 Credits.
4. Each semester will consist of 15 to 18 weeks of Academic Work equivalent to 90 actual teaching days.
5. **In case of practical courses the total periods per week should be 10.**
6. For Semester V & VI, students have to opt for one subject from Discipline Specific Electives (DSE). The Core Courses will remain compulsory.

A student must compulsorily complete **all the core courses** (CC-1 to CC-24) of first, second year and third year along with total **144** credits by end of Semester VI to be eligible to obtain **Degree** at the end of 3rd year.

Vocational Courses :Semester-VI

Course Code	Subjects	Total Hours	Examination Scheme				Total Marks (TH. +PR +IM)	Credits
			Theory (Uni)	CIE (College)	Practical (Uni)			
			Max Marks Theory Paper (TH)	MaxMark s(IM)	Max Marks Practical (PR)	MinPassing Marks		
6T7	Entrepreneurship Development -VI	60	80	20	-	40	100	4

6T8	6T8.1 Computer Application-VI **OR** 6T8.2 Principles and Practice of Insurance-VI **OR** 6T8.3 Advertising, Sales Promotion and Sales Management-VI	60	80	20	-	40	100	4

Course Composition Matrix:

	Sem I	Sem II	Sem III	Sem IV	Sem V	Sem VI	Total Courses
CC	4	4	4	4	4	4	24
AECC	1	1	1	1	-	-	4
SEC	1	1	1	1	1	1	6
DSE	-	-	-	-	1	1	2
Total Sem Credits	24	24	24	24	24	24	36
Total Credits	144						

***Detailed curriculum contents of courses in 1st & 2nd Semester are mentioned in**

Appendix – 2

1. Workload

Workload Chart (70 periods per week) (Odd Semesters)

B.Com. Semester I			
Sr. No.	Course Type	Course/ Subject	No. of Periods
1	CC	Fundamentals of Accounting	5
2	CC	Business Economics – I	5
3	AEC	Commercial Firms OR Digital Marketing OR Vocational Course	5
4	SEC	Business Skills OR MS-Office	5

B.Com. Semester III			
Sr. No.	Course Type	Subjects	No. of Periods
1	CC	Financial Accounting – I	5
2	CC	Monetary Economics - I	5
3	AEC	Company Law OR Income Tax OR Vocational Course	5
4	SEC	Holistic Development OR Computerized Accounting	5

B.Com. Semester V			
Sr. No.	Course Type	Subjects	No. of Periods
1	CC	Financial Accounting - III	5
2	CC	Tax Procedure and Practice	5
3	CC	Human Resource Management	5
4	CC	Agricultural Economics	5
5	DSE	Cost Accounting OR Commercial Psychology OR	5

										Mercantile Law I OR Business Entrepreneurship Development OR Vocational Course	
								6	SEC	Company Audit OR Internship OR Vocational Course	5
Total Periods			**20**				**20**					**30**

Workload Chart (70 periods per week) (Even Semesters)

B.Com. Semester II				**B.Com. Semester IV**				**B.Com. Semester VI**			
Sr. No.	**Course Type**	**Course/ Subject**	**No. of Periods**	**Sr. No.**	**Course Type**	**Subjects**	**No. of Periods**	**Sr. No.**	**Course Type**	**Subjects**	**No. of Periods**
1	CC	Statistics and Business Mathematics	5	1	CC	Financial Accounting - II	5	1	CC	Financial Accounting - IV	5
2	CC	Business Economics – II	5	2	CC	Monetary Economics - II	5	2	CC	International Economics	5
3	AEC	Commercial Services OR	5	3	AEC	Organizational Behaviour OR	5	3	CC	Advanced Statistics	5

		Fundamentals of Banking				Banking Procedure & Practice					
4	SEC	Financial Market Operations OR Skill Development	5	4	SEC	Secretarial Practice OR Insurance Procedure & Practice	5	4	CC	Financial Management	5
								5	DSE	Managerial Accounting OR Hospitality and Health Care OR Management Mercantile Law II OR Commercial Geography in Vidarbha Region OR Vocational Course	5
								6	SEC	Marketing Process OR Advertising Skills OR Vocational Course	5

Total Periods	**20**					**20**					**30**

Weekly Workload Chart (Languages) (For Semesters I,II, III & IV)

Sr. No.	Courses/ Subjects	Periods
1	Compulsory English	5 Periods of Theory + 1 Period of Tutorial for a Batch of 20 Students
2	Second language Supplementary English/ Marathi/ Hindi/Other Languages	5 Periods of Theory

13. Assessment

- The final total assessment of the candidates is made in terms of Continuous Internal Evaluation (CIE) and an external assessment for each course/subject taken together.
- For each paper (other than Internship), 20 marks will be Continuous Internal Evaluation and 80 marks for semester end examination (external assessment) to be conducted at college level (Odd semesters examinations) and RTM Nagpur University level (Even semester examinations)
- All subjects shall have a workload of 5 periods per week, including 4 periods of theory and 1 period for classroom activity-based teaching per week. For Compulsory English 1 additional Tutorial period for a batch of 20 students is allotted.
- Expected classroom activities shall consist of the following: (a) Group Discussion (b) Seminars (c) Power Point Presentations (d) Elocution (e) Debate (f) Role Play (g) Case Studies (h) Educational Games. The teacher is expected to undertake a minimum of four of the aforesaid activity.
- For subjects having Continuous Internal Evaluation (CIE) of 100 marks, separate evaluation mechanism is provided with the detailed curriculum for respective subject.

Continuous Internal Evaluation

1a	Attendance of the student during a particular semester	05 marks
1b	An assignment based on curriculum to be assessed by the teacher concerned	05 marks
1c	Activity and Practical based assessment as per activity / practical record document	10 marks
1	**Internal assessment Total marks**	**20**
2	**Semester wise End Examination marks**	**80**
Total Marks Per Course		**100**

- Each subject teacher must circulate the list of minimum 5 activities/practical of fields assignment/mini project/market surveys/research papers & research/live projects etc.

(based on 5 COs) at the beginning of course and evaluate the same for 10 marks as per 1c above.

- There shall be no separate / extra allotment of workload to the concerned teacher. He/ She shall conduct the CIE activity during the regular teaching days / periods as a part of regular teaching activity.
- The internal marks will be communicated to the University at the end of each semester, but before the semester end examinations / as instructed by university. These marks will be considered for the declaration of the results.
- The record of internal marks, evaluation & result should be maintained for a period of one year by respective institute/college for verification by competent authority.

The maximum and minimum marks which each subject carries in B.Com. Semester - I, Semester - II, Semester – III, Semester – IV, Semester - V & Semester - VI Examination are as indicated in Paragraph 12, A, B, C, D, E & F respectively

14. **(A)** The scope of the subjects and pattern of examination shall be as indicated in the Syllabus (Appendix – 2)
(B) The Medium of instructions and examinations shall be in ENGLISH or HINDI or MARATHI.
(C) The Maximum/minimum marks which each subject carries & workload in B.Com. 1st, 2nd, 3rd, 4th, 5th and 6th Semester Examination shall be as indicated in Examination & Teaching Scheme (item no 12) "A", "B", "C", "D", "E" and "F" respectively.

Internship and its evaluation
During the fifth semester, those students who opt for SEC 5 as "Internship" will have to undergo an internship of 6-10 weeks (Minimum 120 hours) with industry, business, service or social organization. Article ship attended during the fifth semester of B.Com. for Professional Courses like CA/CS/ICWA/CMA/CFA, etc. will be considered as "Internship" provided appropriate documentary proofs are submitted by the student. Students should submit an authentic Internship Project Completion Certificate issued by the competent authority of the business/institution under whom the internship is undertaken. The respective college will assess and evaluate the same as per parameters (like PowerPoint Presentation, Brief Report, etc.) laid down by the college from time to time.

15. Standard of Passing

The scope of the subject, percentage of passing in Theory and Project and CIE will be governed as per following rules:

(i) In order to pass the Bachelor of Commerce (B.Com.) 1st, 2nd, 3rd, 4th, 5th and 6th Semester Examinations, an examinee shall obtain not less than 40 % marks in each paper, that is a student must obtain 40 marks in the written Examination conducted by the College/University and in internal assessment (CIE) put together.

(ii) An examinee who is unsuccessful at the examination shall be eligible for admission to the subsequent examinations on payment of a fresh fee prescribed for the examination together with the conditions of the ordinance in force from time to time.

16. Credit and Grade Point System:

Conversion of Marks to Grades and Calculations of SGPA (Grade Point Average) and CGPA (Cumulative Grade Point Average): In the Credit and Grade Point System, the assessment of individual Courses in the concerned examinations will be on the basis of marks only, but the marks shall later be converted into Grades by some mechanism wherein the overall performance of the Learners can be reflected after considering the Credit Points for any given course. However, the overall evaluation shall be designated in terms of Grade. There are some abbreviations used here that need understanding of each and every parameter involved in grade computation and the evaluation mechanism. The abbreviations and formulae used are as follows:-

Abbreviations and Formulae Used

G: Grade
GP: Grade Points
C: Credits
CP: Credit Points

CG: Credits X Grades (Product of credits & Grades)
SGPA = ΣCG: Sum of Product of Credits & Grades points / ΣC: Sum of Credits points

SGPA: Semester Grade Point Average shall be calculated for individual semesters. (It is also designated as GPA)
CGPA: Cumulative Grade Point Average shall be calculated for the entire Programme by considering all the semesters taken together.

Grade Conversion Table and Computation of SGPA and CGPA

Grade Conversion Table (Theory)

SN	Letter Grade	Grade Point	Mark Range	Performance
1	O	9.00 - 10.00	90 – 100	Outstanding
2	A+	8.00 - < 9.00	80 - < 90	Excellent
3	A	7.00 - < 8.00	70 - < 80	Very Good
4	B+	6.00 - < 7.00	60 - < 70	Good
5	B	5.50 - < 6.00	55 - < 60	Above Average
6	C	5.00 - < 5.50	50 - < 55	Average
7	P	4.00 - < 5.00	40 - < 50	Pass
8	F	Below 4	Below 40	Fail
9	AB	0	-	Absent

Grade Conversion Table (Practical)

SN	Letter Grade	Grade Point	Mark Range	Performance
1	O	9.00 - 10.00	90 - 100	Outstanding
2	A+	8.00 - < 9.00	80 - < 90	Excellent
3	A	7.00 - < 8.00	70 - < 80	Very Good
4	B+	6.00 - < 7.00	60 - < 70	Good
5	B	5.50 - < 6.00	55 - < 60	Above Average
6	P	5.00 - < 5.50	50 - < 55	Pass
7	F	Below 5	Below 50	Fail
8	AB	0	-	Absent

Computation of SGPA & CGPA:

The UGC recommends the following procedure to compute the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

i. The SGPA is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e

$$SGPA\ (Si) = \Sigma(Ci \times Gi) / \Sigma Ci$$

where Ci is the number of credits of the ith course and Gi is the grade point scored by the student in the ith course.

ii. The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a programme, i.e.

$$CGPA = \Sigma(Ci \times Si) / \Sigma Ci$$

where Si is the SGPA of the ith semester and Ci is the total number of credits in that semester.

iii. The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

iv. CGPA to Percentage (%) conversion formula:

Percentage (%) = (CGPA) * 10

A. Division at the B.Com. semester VI examination shall be declared on the basis of the aggregate marks at the B.Com. semester I, semester II, semester III, semester IV, semester V and semester VI examinations taken together and the CGPA will be calculated and notified.

B. **The successful examinees at the B.Com. semester VI examination shall be awarded division based on CGPA**

C. The percentage of passing marks in each subject shall be as indicated in Examination Scheme (item no 12) "A", "B", "C", "D", "E" and "F" respectively.

D. Unsuccessful examinees at the above examinations can be readmitted to the same examination on payment of a fresh fee and such other fees as may be prescribed.

E. Provisions of **Ordinance No. 3 of 2007** relating to the award of Grace Marks for passing an examination, securing higher division / class and for securing distinction in subject(s) shall be applicable.

F. University guidelines and directions issued from time to time regarding Improvement of Results, Reassessment/Revaluation and Incentive Marks shall be applicable to B. Com. Program covered under this direction.

G. Notwithstanding anything to the contrary in this Direction, no person shall be admitted to an examination under this Ordinance, if he/ she has already passed the same examination or an equivalent examination of any other University.

H. Examinees passing all the **Bachelor of Commerce (B.Com.)** Examination shall on payment of the prescribed fees shall receive a Degree in the prescribed form signed by the Vice-Chancellor.

I. The aforesaid Amendment shall come into force from the date of its issuance and shall remain in force till the relevant Ordinance comes into being in accordance with the provisions of the Maharashtra Public Universities. Act, 2016 (Mah. Act No. VI of 2017).

J. The marks for internal assessment should be communicated to the University within the time limit as per university norms. The record of conduct of such examination, evaluation and marks for internal assessment should be maintained for a period of at least **one** year by the respective college / Department for the verification by the competent authority.

17. Promotion to Higher Semester (A.T.K.T.):

A. The unsuccessful candidate of any semester examination shall be ALLOWED TO KEEP THE TERM (ATKT) in accordance with the following table: (Theory and Internal assessment of that theory subject shall be jointly considered as single passing head).

Admission to academic year	Candidate should have passed All courses of the following examination	Candidate should have filled the examination form and appeared for the following examinations	Candidate should have passed in Minimum 50% courses of the following examination

1st Semester	H.S.S.C/equivalent	-----	-----
2nd Semester	-----	1st Semester	-----
3rd Semester	-----	2nd Semester	50% courses of 1st and 2nd Semesters taken together
4th Semester	-----	3rd Semester	As Above
5th Semester	1st and 2nd Semesters	4th Semester	50% courses of 3rd and 4th Semesters taken together
6th Semester*	As Above	5th Semester	As Above

B. **Note: (*)** A candidate admitted to Final Semester can appear for Final Semester examination however the result of the Final Semester examination will be withheld (NCL – Not Cleared lower semester examinations) unless the candidate clears all the lower examinations of the **B.Com. Program.**

*Note: For calculating the requirement of fifty percent passing heads fraction if any is to be ignored as per the provisions of Direction no. 10 of 2019.

C. **Pattern of Question Papers of B.Com. year end Examination:**

a. The question paper should be set in such a manner to cover the complete syllabus as prescribed by the University.

b. The Semester End examination shall be held as per the schedule notified by the University.

c. The question paper shall be of 80 marks & the time duration of the Semester End examination would be 3 hours.

d. **Question Paper Pattern for the courses included in this syllabus will be as per Appendix – 2**

e. The paper setters /moderators shall submit the proposed marking scheme (Memorandum of Instructions) along with the question paper so that the students can be given due credit for precise answers.

18. Absorption Scheme for Examinees of B.Com. CBS Pattern Course (Introduced in 2016):

I. The students of the B.Com. CBS Syllabus (Introduced in 2016) immediately preceding the new course under this direction shall be given a chance to appear for **Five** more consecutive examinations according to the old B.Com. CBS syllabus (Introduced in 2016). The College shall conduct the examinations of odd semesters whereas the University shall conduct the examination of even semester courses for **five** more consecutive examinations after the new scheme of examination is introduced as per following table:

B.Com. Examination	Attempt 1	Attempt 2	Attempt 3	Attempt 4	Attempt 5

B.Com. Sem I	Winter 2021	Summer 2022	Winter 2022	Summer 2023	Winter 2023
B.Com. Sem II	Summer 2022	Winter 2022	Summer 2023	Winter 2023	Summer 2024
B.Com. Sem III	Winter 2022	Summer 2023	Winter 2023	Summer 2024	Winter 2024
B.Com. Sem IV	Summer 2023	Winter 2023	Summer 2024	Winter 2024	Summer 2025
B.Com. Sem V	Winter 2023	Summer 2024	Winter 2024	Summer 2025	Winter 2025
B.Com. Sem VI	Summer 2024	Winter 2024	Summer 2025	Winter 2025	Summer 2026

The students are required to clear all their papers within the stipulated time. The students clearing all the papers of the old scheme of Examination (B.Com. CBS Syllabus Introduced in 2016) shall be awarded a Degree according to the old scheme of Examination. But the students who failed to clear their course/s in 5 consecutive attempts as per this clause, will be absorbed in the scheme of examination under this direction as per following guidelines:

A. The candidates who have cleared B.Com. 1st year (Semester I and II) of the old course (CBS Pattern - Introduced in 2016) examination shall be eligible for admission to B.Com. 2nd Year of the new course (CBCS) but in such case the student will have to clear all those subjects (B.Com. Sem I and II) which were not included in the previous CBS syllabus (introduced in 2016) but are part of the new syllabus.

B. The candidates who have cleared B.Com. 2nd year (Semester I to IV) of the old course (CBS Pattern - Introduced in 2016) examination shall be eligible for admission to B.Com. 3rd Year of the new course (CBCS) but in such case the student will have to clear all those subjects (B.Com. Sem I, II, III and IV) which were not included in the previous CBS syllabus (introduced in 2016) but are part of new syllabus.

II. CLARIFICATION ON ABSORPTION SCHEME

The absorption of students of previous CBS course (Introduced in 2016) referred above shall be made to the new course in the following manner:

Situation 1: A student had completed 1st year of B.Com. as per CBS syllabus (introduced in 2016) but due to some reasons the student is dropped out for subsequent years of the previous syllabus (B.Com. CBS Syllabus)

A student who has passed all courses of B.Com. 1st year CBS Pattern Programme (Introduced in 2016), shall be admitted to B.Com. 2nd Year CBCS Pattern but he/ she must complete those courses which are not considered to be equivalent with the previous CBS pattern examination. In such a case a student will be required to take nominal admission to B.Com. 1st year under this new direction by paying Rs. 500 and will fill and submit the exam form of B.Com. 1st and/or 2nd Semester of the new

syllabus (as per this direction) for those courses only which are not considered to be equivalent courses with old syllabus (B.Com. CBS sytlabus). The student will also be allowed to fill and submit the regular exam form semester III.

Situation II: A students has not completed 1st year of B.Com. as per CBS syllabus (introduced in 2016) but have cleared few of the courses of 1st year and is dropped out for subsequent years of the previous syllabus (B.Com. CBS Syllabus)

A student who has cleared 6 or more courses of B.Com. CBS syllabus (introduced in 2016) and has backlogs in remaining courses will be allowed to take admission into 2nd year of B.Com. CBCS Pattern under this direction, but he/she must complete those courses which are not considered to be equivalent with the previous CBS pattern examination. In such a case a student will be required to take nominal admission to B.Com. 1st year under this new direction by paying Rs. 500 and will fill and submit the exam form of B.Com. 1st and/or 2nd Semester of the new syllabus (as per this direction) for those courses only which are not considered to be equivalent courses with old syllabus (B.Com. CBS syllabus). The student will also be allowed to fill and submit the regular exam form semester III.

A student who has backlog in 7 or more courses of B.Com. CBS syllabus (introduced in 2016). In such a case a student will not be eligible for admission to B.Com. 2nd year CBCS Pattern and will be required to take nominal admission to B.Com. 1st year under this new direction by paying Rs. 500 and will fill and submit the exam form of B.Com. 1st and/or 2nd Semester of the new syllabus (as per this direction) for those courses only which are not considered to be equivalent courses with old syllabus (B.Com. CBS syllabus). The student will be able to take admission in 2nd year after successful completion of B.Com. 1st year under this new syllabus.

Situation III: A students has completed 2nd year of B.Com. as per CBS syllabus (introduced in 2016) and have cleared all the courses of 2nd Year and is drop out for subsequent years of the previous syllabus (B.Com. CBS Syllabus)

A student who has passed all courses of B.Com. 1st year and 2nd year under CBS Pattern Syllabus (Introduced in 2016), shall be admitted to B.Com 3rd Year CBCS Pattern but he/she must complete those courses which are not considered to be equivalent with the previous CBS pattern examination. In such a case a student will be required to take nominal admission to B.Com. 1st and 2nd year under this new direction by paying Rs. 500 for each year and will fill and submit the exam form of B.Com. 1st to 4th semester of the new syllabus (as per this direction) for those courses only which are not considered to be equivalent courses with old syllabus (B.Com. CBS syllabus). The student will also be allowed to fill and submit the regular exam form semester V.

Situation IV: A students has not completed 2nd year of B.Com. as per CBS syllabus (introduced in 2016) but have cleared few of the courses of 2nd Year and is drop out for subsequent years of the previous syllabus (B.Com. CBS Syllabus)

A student who has passed 6 or more courses of B.Com. 2nd year under CBS Pattern Syllabus (Introduced in 2016) and has backlogs for remaining courses, shall be

admitted to B.Com. 3rd Year CBCS Pattern but he/she must complete those courses which are not considered to be equivalent with the previous CBS pattern examination. In such a case a student will be required to take nominal admission to B.Com. 1st and 2nd year under this new direction by paying Rs. 500 for each year and will fill and submit the exam form of B.Com. 1st to 4th semester of the new syllabus (as per this direction) for those courses only which are not considered to be equivalent courses with old syllabus (B.Com. CBS syllabus). The student will also be allowed to fill and submit the regular exam form semester V.

A student has backlogs in 7 or more courses of B.Com. 2nd year under CBS Pattern Syllabus (Introduced in 2016) and has cleared the remaining courses. In such a case a student will be required to take nominal admission to B.Com. 1st and 2nd year under this new direction by paying Rs. 500 for each year and will fill and submit the exam form of B.Com. 1st to 4th semester of the new syllabus (as per this direction) for those courses only which are not considered to be equivalent courses with old syllabus (B.Com. CBS syllabus). Such student shall be admitted to B.Com. 3rd Year only after successful completion of those courses which are not considered to be equivalent with the previous CBS pattern examination.

III. Equivalence of Subjects

The equivalence & eligibility for exemption of subjects for the students absorbed in the new course shall be as follows:

Name of Course in New Scheme (CBCS)	Semester Examination	Name of Equivalent Course in Old Scheme (2016)	Semester Examination
Fundamentals of Accounting	I	Financial Accounting - I	I
Business Economics - I	I	Business Economics - I	I
Compulsory English	I	Compulsory English	I
Second language Supplementary English/ Marathi Hindi Other Languages #	I	Second language Supplementary English/ Marathi Hindi Other Languages #	I
Commercial Firms	I	Company Law	I
Digital Marketing	I	NO	
Business Skills	I	Business Organization	I
MS Office	I	NO	
Statistics and Business Mathematics	II	Statistics and Business Mathematics	II
Business Economics - II	II	Business Economics - II	II
Compulsory English	II	Compulsory English	II
Second language	II	Second language	II

Supplementary English/ Marathi Hindi Other Languages #		Supplementary English/ Marathi Hindi Other Languages #	
Commercial Services	II	Secretarial Practice	II
Fundamentals of Banking	II	NO	
Financial Markets Operations	II	Business Management	II
Skill Development	II	NO	
Financial Accounting - I	III	Financial Accounting – II	III
Monetary Economics - I	III	Monetary Economics - I	III
Compulsory English	III	Compulsory English	III
Second language Supplementary English/ Marathi Hindi Other Languages #	III	Second language Supplementary English/ Marathi Hindi Other Languages #	III
Company Law	III	Business Law	III
Income Tax	III	Income Tax	IV
Holistic Development	III	Business Communication and Management	III
Computerized Accounting	III	NO	
Financial Accounting – II	IV	Financial Accounting – III	IV
Monetary Economics - II	IV	Monetary Economics – II	IV
Compulsory English	IV	Compulsory English	IV
Second language Supplementary English/ Marathi Hindi Other Languages #	IV	Second language Supplementary English/ Marathi Hindi Other Languages #	IV
Organizational Behaviour	IV	Skill Development	IV
Banking Procedure & Practice	IV	NO	
Secretarial Practice	IV	NO	
Insurance Procedure & Practice	IV	NO	
Financial Accounting – III	V	Financial Accounting – IV	V
Tax Procedure and Practice	V	Business Finance I OR Management Process	V V
Human Resource Management	V	Marketing Management OR Computerized Accounting	V V
Agricultural Economics	V	Indian Economy I	V

Cost Accounting	V	Cost Accounting	V
Commercial Psychology	V	NO	
Mercantile Law I	V	NO	
Business Entrepreneurship Development	V	NO	
Company Audit	V	Auditing	V
Internship	V	NO	
Financial Accounting – IV	VI	Financial Accounting – V	VI
International Economies	VI	Indian Economy II	VI
Advanced Statistics	VI	Advanced Statistics	VI
Financial Management	VI	Business Finance II OR Industrial Law	VI VI
Managerial Accounting	VI	Management Accounting	VI
Hospitality and Health Care Management	VI	NO	
Mercantile Law II	VI	NO	
Commercial Geography in Vidarbha Region	VI	NO	
Marketing Process	VI	Human Resource Management OR Indirect Tax	VI VI
Advertising Skills	VI	NO	

(*) All these subjects have no equivalent subjects in the B.Com. Previous Course (CBS Pattern) Examination (introduced in 2016). Hence, students desiring for absorption in New Course (CBCS Pattern) under this Direction are mandatorily required to appear for these subjects in respective semesters.

The above absorption scheme of B.Com. shall be effective till the introduction of new Syllabus.

19. Provision for Multiple Exit

The B.Com. program offered under this direction provides an opportunity to students for multiple exits from the program as per following conditions:

a. A student can exit the program after successful completion of 1st and 2nd Semester courses and obtaining 48 credits. Such a student is eligible to be awarded 'Certificate in Commerce' by the University.

b. A student can exit the program after successful completion of 1st, 2nd, 3rd and 4th Semester courses and obtaining 96 credits. Such a student is eligible to be awarded 'Diploma in Commerce' by the University.

c. A student who has completed the 3 years program and earned 144 credits will be considered eligible for award of 'Bachelor of Commerce' degree by the University.

d. A student who wishes to exit the program before completion of 3 years is required to apply to the university through Principal.

e. A student who opted for exit from the program before completion of 3 years (a & b) above shall be eligible for admission to next year of the program in any subsequent academic session. However, if at the time of admission, if this scheme of examination is not in force, the student will have to complete the program according to the provisions made under the direction prevailing at the time of such admission.

20. Provision for Transfer of Credits

B.Com. program offered under this direction provides enhanced academic flexibility to students in terms of selecting the courses they want to learn. A student can opt for any course from any statutory/recognized University or any recognized online learning platform such as SWAYAM/NPTEL in lieu of a course (except Core Course and Discipline Specific Electives) mentioned in this scheme of examination. Similarly, a student can opt for transfer of credits by successfully completing the course recognized by the 'Adult and Continuing Education Centre' of Rashtrasant Tukadoji Maharaj Nagpur University. The mechanism for transfer of credits earned through these courses to be adhered is mentioned here:

1. A student seeking for facility for transfer of credits earned from any other platform will have to mandatorily open an account with 'Academic Bank of Credits' and upload the credits so earned therein.
2. Any Core Course or Discipline Specific Elective mentioned in this scheme of examination cannot be opted out by a student.
3. A student can opt out any course other than Core Course/Discipline Specific Elective and earn equal number of credits by completing any ODL or Online course/s from any statutory/recognized University or any recognized online learning platform such as SWAYAM/NPTEL.
4. A student can opt out any course other than Core Course/ Discipline Specific Elective and earn equal number of credits by successfully completing the course recognized by the 'Adult and Continuing Education Centre' of Rashtrasant Tukadoji Maharaj Nagpur University.
5. If a student is willing to opt out any such course, he/she will have to mention this while submitting the examination form to the University for respective semester.
6. A certificate of completion of such an ODL/Online course shall be submitted by the student to the University through college before end term evaluation.

7. Such a certificate shall mandatorily have the number of credits, duration of the course and grades obtained by the student and shall preferably have a QR code for verification.
8. The college shall submit the grades and marks obtained by the student to the University along with Internal Assessment marks for the concerned examination.
9. If a student has opted for an ODL/Online course in a particular semester and failed to submit the certificate within prescribed time, the student will be marked for "Absent" for a particular course in that examination. Such a student will be required to fill in the examination form in the consecutive attempt and submit the passing certificate to get his/her corrected result.
10. The procedure for transfer of credits mentioned under this direction is subject to the guidelines issued by the University in this regard and a separate direction for the said purpose shall be issued by the University.

21. Eligibility for award of Degree:

In order to become eligible for award of 'Bachelor of Commerce (B.Com.)' degree, a student must fulfil the following conditions:

a. A student must earn minimum 144 credits in not less than 3 years.
b. A student must successfully complete (pass) all Core Courses and Discipline Specific Electives mentioned in this direction.

22. If any question of interpretation of any clause arises for this Direction & Appendix I & II the same shall be referred to the Dean, Faculty of Commerce and Management, whose decision shall be final and binding on all concerned.

23. Saving Clause: The examination and teaching scheme mentioned in this direction shall also be applicable to students admitted to the B. Com. Program under Direction No. 42 of 2022.

(Dr. Subhash C. Chaudhari)
Vice-Chancellor

Nagpur
Date: 10-10-23

Appendix I

List of Core Courses, Ability Enhancement Compulsory Courses, Skill Enhancement Courses and Discipline Specific Elective

A) List of Core Courses (CC)

SN	Semester	Paper / Subjects
1	Sem I	Fundamentals of Accounting
2		Business Economics – I
3		Compulsory English
4		Second language Supplementary English/ Marathi/ Hindi/Other Languages/Vocational Course
5	Sem II	Statistics and Business Mathematics
6		Business Economics - II
7		Compulsory English
8		Second language Supplementary English/ Marathi/ Hindi/Other Languages/Vocational Course.
9	Sem III	Financial Accounting - I
10		Monetary Economics - I
11		Compulsory English
12		Second language Supplementary English/ Marathi/ Hindi/Other Languages/Vocational Course
13	Sem IV	Financial Accounting – II
14		Monetary Economics – II
15		Compulsory English
16		Second language Supplementary English/ Marathi/ Hindi/Other Languages/Vocational Course
17	Sem V	Financial Accounting - III
18		Tax Procedure and Practice
19		Human Resource Management
20		Agricultural Economics
21	Sem VI	Financial Accounting - IV
22		International Economics
23		Advanced Statistics
24		Financial Management

B) List of Ability Enhancement Courses (AEC)

Semester	Paper / Subjects

Sem I (Any One)	Commercial Firms
	Digital Marketing
	Vocational Course
Sem II (Any One)	Commercial Services
	Fundamentals of Banking
	Vocational Course
Sem III (Any One)	Company Law
	Income Tax
	Vocational Course
Sem IV (Any One)	Organizational Behaviour
	Banking Procedure & Practice
	Vocational Course

C) List of Skill Enhancement Courses (SEC)

Semester	**Paper / Subjects**
Sem I (Any One)	Business Skills
	MS-Office
Sem II (Any One)	Financial Market Operations
	Skill Development
Sem III (Any One)	Holistic Development
	Computerized Accounting
Sem IV (Any One)	Secretarial Practice
	Insurance Procedure & Practice
Sem V (Any One)	Company Audit
	Internship
	Vocational Course
Sem VI (Any One)	Marketing Process
	Advertising Skills
	Vocational Course

D) List of DSE (Discipline Specific Electives):

Semester	**Paper / Subjects**
Sem V (Any One)	Cost Accounting
	Commercial Psychology
	Mercantile Law I
	Business Entrepreneurship Development
	Vocational Course
Sem VI (Any One)	Managerial Accounting
	Hospitality and Health Care Management
	Mercantile Law II
	Commercial Geography in Vidarbha Region

	Vocational Course

If the student wishes to opt for any course other than offered by the University, He / she can register for any other equivalent credit ODL (Open and Distance Learning) courses and submit the passing certificate.

RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY
"Established by Government of Central Provinces Education Department vide Notification No. 513 dated the 1st of August, 1923 & presently a State University governed by Maharashtra Public Universities Act, 2016 (Mah. Act No. VI of 2017)

DIRECTION NO.46 OF 2022

ADMISSIONS AND EXAMINATIONS LEADING TO THE AWARD OF THE DEGREE OF BACHELOR OF ARTS (CHOICE BASED CREDIT SYSTEM) (THREE YEAR DEGREE COURSE) DIRECTION, 2022.

Whereas, Maharashtra Public Universities Act, 2016 (VI of 2017) (hereinafter the Act) has come into force from 1st March 2017;

AND

Whereas, the University has issued Direction No.15 of 2017 dealing with the composition of the four faculties created by the Act, where under the existing different faculties of the University have been merged into the four new faculties created by the Act, by which the erstwhile independent faculties of "Arts" and "Social Sciences" have been merged in the new faculty of "Humanities" under the Act;

AND

Whereas, the University Grants Commission, New Delhi vide letter No.D.O.No.F-1-2/2008 (XI Plan) dated 31st January 2008 regarding new initiatives under the XI Plan-Academic Reforms in the University has suggested for improving quality of higher education and to initiate the Academic Reforms at the earliest,

AND

Whereas, the Special Task Committees under the erstwhile faculties of Arts and Social Sciences in their meetings held during 02nd March 2016 to 16th May 2016, prepared the syllabi and scheme of examination for the Bachelor of Arts, Semester Pattern (Three Year Degree Course) in the erstwhile Faculties of Arts and Social Science and recommended to the Hon'ble Vice-Chancellor for starting the said course from the academic session 2016-17;

AND

Whereas, the Hon'ble Vice Chancellor of Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur in exercise of his powers under 14(7) of the Maharashtra University Act, 1994 (since repealed by the Act VI of 2017) had considered, accepted and recommended to the Academic Council, on behalf of the Board of Studies under the Faculties of Arts and Social Science, the policy decision regarding introduction of Bachelor of Arts, Semester Pattern

, course, it's syllabi along with the draft Direction and the scheme of examination for semesters-I to VI;

AND

Whereas, the Academic Council in its meeting held on 08th June, 2016 vide item No. 1(B) & 4 (B) has considered, accepted and recommended to Management Council, the syllabus for the for Bachelor of Arts (Three Year Degree Course) in the Faculty of Arts & Social Science, (Semester Pattern) with draft direction and the Scheme of examination of Semester-I to VI;

AND

Whereas, the Management Council in its meeting held on 14th June, 2016 vide item No. 96 (B)& 99(B), had considered and accepted the course of Bachelor of Arts, (semester pattern) (Three Years Degree Course) in the erstwhile Faculties of Arts & Social Science, with draft Direction and scheme of examination of Semester-I to VI;

AND

Whereas, Direction No. 12 of 2016, introducing the semester pattern Bachelor of Arts (Three Year Degree Course) from the Academic Session 2016-17 had been issued by the University;

AND

Whereas, the University had issued Direction No. 13 of 2017 prescribing "conditions for conduct of undergraduate and post graduate examinations based on credit based/choice based credit system, in all faculties, Direction, 2017" on 06/06/2017, prescribing certain conditions relating to maximum and minimum passing marks in the theory /practical subjects prescribed in the semester of a course, the maximum theory and practical subjects in a semester, rules of exemption and ATKT, and also the coding pattern for the subjects in each semester of the course;

AND

Whereas, provision for Additional B.A. on the lines prescribed in Ordinance No. 146/1997, since repealed, had been provided vide the decision of the Vice-Chancellor taken under section 12(7) of the Act, on behalf of the faculty of Humanities, on 05-01-2019 and the same were incorporated in the Direction no. 04 of 2019;

AND

Whereas, in the meeting of Board of Deans held on 19.7.2021 certain recommendations were made regarding regrouping of subjects to be opted by the students, Credit allocation and conduct of examination for the B.A. Program, the said recommendations were accepted in the Faculty meetings held on 3rd and 7th August 2021 and the Academic Council in its meeting held on 9th August 2021 approving the said changes recommended the same to the Management Council for its acceptance which were considered and approved by the Management council in its meeting dated 13th August 2021.

AND

Whereas, in order to give effect to the provisions of New National Education Policy certain changes in the scheme of examination were accepted and recommended by the Board of Studies in various subjects of Arts/Humanities in their meetings dated 30.8.2022

AND

Whereas, the meetings of Faculty of Humanities and Academic Council are not scheduled in near future and there was exigency to implement the new scheme of examination from the Academic Year 2022-23 for Bachelor of Arts and therefore the scheme of examination was accepted by Vice Chancellor exercising the powers conferred under section 12(7) of the Act;

AND

Whereas, Direction No. 28 of 2021- replacing Direction No. 11 of 2020 was issued by the University but the same has lapsed by virtue of the provision of proviso to section 12(8) of the Act necessitating the issuance of a fresh Direction, incorporating the provisions of the lapsed Direction with changes necessitated by the decisions of various authorities referred above;

Now, therefore, I, Dr. Subhash R. Chaudhari, in exercise of my powers under section 12(8) of the Act, do hereby issue the following Direction;

1. This Direction may be called **"Admissions and Examinations leading to the award of the Degree of Bachelor of Arts (Choice Based Credit System) (Three Year Degree Course) Direction, 2022"**

2. This Direction shall come into force from the date of its issuance.

3. The duration of the B.A. course shall be of three academic years consisting of six semesters with the University examinations at the end of each semester namely:

   a) B.A. Semester I Exam
   b) B.A. Semester II Exam
   c) B.A. Semester III Exam
   d) B.A. Semester IV Exam
   e) B.A. Semester V Exam
   f) B.A. Semester VI Exam

4. The theory examinations of semesters-I, III, and V shall be conducted by the respective colleges where the students have been formally admitted for pursuing the studies in respect of the program govern by this Direction and the theory examinations for semesters II IV and VI and also the practical examinations, wherever prescribed, irrespective of the semesters, shall be conducted by the University at the places and according to the Time table notified by the University.
   The regular examinations for the odd semesters shall be conducted in Winter and the regular examinations for the even semesters shall be conducted in the Summer. The modality and details of semester I, III and V examinations to be conducted by the Colleges shall be notified separately by the University.

5. ELIGIBILITY TO THE COURSE:

In order to be eligible for admission to the 1st semester of Bachelor of Arts, Semester Pattern (Three Year Degree) course, the applicant should have passed the 12th standard examination of the Maharashtra State Board of Secondary and Higher Secondary Education in the Faculty of Arts or Faculty of Commerce or Faculty of Science, Vocational Stream, Professional Courses or any other 10+2 examination with English as one of the compulsory subject. Where, however, the applicant has passed the 12th standard examination without English as the compulsory paper such applicant shall have to obtain the eligibility certificate from the University.

6. ELIGIBILITY FOR ADMISSION IN EXAMINATION:-

Subject to compliance with the provisions of this Direction and of other ordinances in force from time to time, the following persons shall be eligible for admission to the examination:-

(a) A student who has prosecuted a regular course of study for not less than six months prior to that examination;

(b) A teacher in an educational institution eligible under the provisions of Ordinance No. 18;

(c) An external student.

Provided that in the case of the candidates eligible under clause (a) and (b) above the candidate shall have attended a course of laboratory instructions by obtaining casual admission in a college for the subject in which laboratory work is prescribed. Such a candidate shall submit a certificate to that effect signed by the Principal of the college.

(d) For external candidate the internal mark of a subject/paper shall be awarded in proportion to the marks secured by him/her in the University examination in the theory or practical subject/paper.

7. **ATKT Rules:-** Only the students who have taken admission as regular students are eligible for the benefits of the ATKT rules hereunder. Thus the external students and the students appearing in examinations under para 6 (b) above and para 21 hereinafter are not eligible for the benefit of the ATKT rules.

The ATKT rules for admission in higher semesters of the B.A. (Choice Based Credit System) course shall be as given in following table:

	Admission to Semester	The student should have attended the session satisfactorily and appeared for the examination.	Candidate should have passed in at least 50% of the passing heads of the examinations, fraction , if any, to be ignored (Theory and Practical being separate passing heads.)
A	B.A.Ist Semester	----------	----------
B	B.A.IInd Semester	B.A. Ist semester	----------
C	B.A.IIIrd Semester	B.A. IInd semester	Semester I and Semester II examinations taken together.
D	B.A.IVth Semester	B.A. IIIrd semester	----------
E	B.A.Vth Semester	B.A. IV semester	a) Should have passed the examinations of semester I and semester II, And b) 50% of the total number of heads prescribed for semester III and semester IV examinations.
F	B.A.VIth Semester	B.A. V semester	----------

8) a) Without prejudice to other provisions of Ordinance no. 6 relating to the examination in general, provisions of Para 5, 8, 10 and 31 of the said ordinance shall apply to every student admitted to this course.

b) The students admitted to this Degree Course shall be governed by the general Ordinances/ Directions of the University which are applicable to all the regular, external and ex-students. These ordinances include complete as well as relevant provision of Ordinance No. 1, 2, 5, 7-A, 9, 10, 19, 109, ordinance No. 30 of 2006, (Amended Ordinance No. 4 of 2006), Direction 9 of 2008, Direction 5 of 2004, wherever applicable.

9) The fee for the course including the tuition, examination, laboratory and other fees shall be as prescribed by the university from time to time.

10) Students can opt. following papers for the B.A. Semester I to VI as per the details given below:-

Paper – I Code – 1T1	Compulsory English	Compulsory subject	Compulsory
Paper – II Code – 1T2	Second Language: Marathi, Hindi, Urdu, Supplementary English, Gujrati, Bengali, Telugu, Sanskrit, French, German, Russian, Persian, Arabic, Pali and Prakriti or Latin	Any one of these languages	Compulsory
Elective – I Code – 1T3	Marathi Literature, Hindi Literature, Urdu Literature, Gujrati Literature, Bengali Literature, Telugu Literature, French Literature, German Literature, Russian Literature, Persian Literature, Arabic Literature, Pali and Prakrit Literature, Latin Literature, Sanskrit Literature, Communicative English, Functional English, English Literature, Functional Hindi,	Choose any 03 Electives from these groups and maximum one subject from each elective.	Optional
Elective – II Code – 1T4	Sociology, Ancient Indian History Culture & Archaeology,		
Elective – III Code – 1T5	History, Buddhist Studies, Library and information Science		
Elective – IV Code – 1T6	Political Science, Public Administration Mathematics		

Elective – V Code – 1T7	Economics, Dr. Ambedkar Thoughts, Gandhian Thoughts, Philosophy		
Elective – VI Code – 1T8	Home Economics, Drama, Statistics		
Elective – VII Code – 1T9	Geography, Military Science, Fashion Designing		
Elective – VIII Code – 1T10	Psychology, Music, Fine Arts		
Elective –IX Code – 1T11	Internship : Only for VI Semester Students		Optional
Core Audit Course – X Code – 1T12	A) Indian Constitution: Semester II B) Environment: Semester IV C) Skill Based Program (Online): One every year Annexure-I		Compulsory

Note: The coding of the subjects in the semester II onward shall be on the lines of the coding in the first semester. Thus the theory papers in semester II shall be coded as 2T1 to 2T12 and so on. In case of the practical subject the same shall be coded as 1P1, 1P2 or 2P1,2P2 or 3P1,3P2 and so on depending upon the semester. Also the coding may be changed to convert it in Unique Subject Code.

11) The five subject offered by the students at semester I level will remain unchanged till the final semester.

12) (a) The scope of the subjects shall be as prescribed in the syllabus.

(b) The medium of instruction and examination shall be English, Hindi, Marathi, except for the courses in Languages and Literature.

13) The maximum marks assigned to each paper and minimum marks, an examince must obtain in order to pass the examination shall be as per clause 25 herein.

14) The practical examination of all semester will be conducted at the end of each semester as indicated in the table given below:

Sr. No.	Name of the examination	Main Examination	Supplementary Examination
1	Semester I, III & V	Winter	Summer
2	Semester II, IV & VI	Summer	Winter

15) The scheme of awarding internal marks shall as per clause 26 of this Direction.

16) Successful examinees at the B.A. Sem-VI Examination who obtained not less than 60% marks (aggregate of Sem- I, II, III, IV, V and VI Examinations taken together) shall be placed in first division, those obtaining less than 60% but not less than 45% in second Division, and all other successful examinees below 45% in third division.

17) There shall be no classification of successful candidates at Sem- I to Sem-V Examination. The division of the successful candidate shall be declared at the end six semester taking in to consideration the score of all six semesters. However at the end of every semester the University shall declare SGPA and CGPA of the candidate.

18) An examinee successful in the minimum period prescribed for the examination, obtaining not less than 75% of the maximum marks prescribed in the subject shall be declared to have passed the examination with Distinction at that subject. Distinction shall not be awarded to an examinee availing of the provision of the exemptions and compartments at any of the examination.

19) Provisions of Ordinance No. 7-A relating to the condonation of Deficiency of Marks for passing an examination and compartment as amended updated vide ordinance No. 45 of 1983 shall apply to the examinations under this Direction.

20) The names of the successful examinee passing the examination as a whole in the minimum prescribed period and securing the grades equivalent to first and second division shall be arranged in order of merit as provided in ordinance 6 relating to examination in general.

21) No candidate shall be admitted to an examination under this Direction, if he / she has already passed the same examination of this university or of any other university. However, any person who has passed Final B.A. examination under this Direction or any earlier Ordinances/Direction of this University or any of the First Degree Examination of this University or of any other Statutory University may on payment of the fee prescribed by the University, from time to time, be admitted to subsequent examination in one or more optional subject/s not offered by him/her in earlier examination, without being required to prosecute regular course of studies in the subject/s in a college. Such an examinee will be required to take simultaneously all the examinations of the six semesters leading to the Degree of Bachelor

of Arts in subject/s and on securing not less than the minimum passing marks prescribed for the subject/s shall be issued a certificate of having passed examination in the Additional subject/s as the case may be.

22) Successful examinees at the B.A. Semester I, II, III, IV, V and VI Examinations shall be entitled to receive a Certificate signed by the Director, Board of Examinations & Evaluation of University (DBE&E) and successful examinees at the end of B.A. Semester VI examination shall, on payment of prescribed fees, receive a Degree in the prescribed format, signed by the Vice-Chancellor.

23) The provisions of Direction No. 3 of 2007 for the award of grace marks for passing an examination, securing higher grade in subject(s) as updated from time to time shall apply to the examination under this direction.

24) **Absorption scheme** to be notified separately.

ELIGIBILITY CERTIFICATE

(For getting admission for Semester III or Semester V of Degree Course)

Name of the Previous Examination _____ Year _____

This is to certify that this Shri / Shrimati / Kumari _____ _____ is eligible

to get the admission for _____ of B.A. Degree Course.

Name and signature of the Principal
Name of the College

Dated ___ / ___ / _____

SEAL

25. Teaching & examination scheme Bachelor of Arts, (Choice Based Credit System)(Three Year Degree Course)
B.A. (Semester I, II, III, IV, V, VI)

Total Credit : 120

Subject	Teaching Scheme				Examination Scheme					No. of Periods
	Th	Tu	Prac	Total	Maximum Theory /Practical and Internal Assessment Marks					
					Exam Time in Hrs	Theory Max Marks	Internal Assesment/ Prac. Marks	Total	Total Passing Marks	No. of Periods (48 Min. each)
Compulsory English	04	01*	----	05	3	80	20	100	40	5
Second Languages	04	----	----	04	3	80	20	100	40	4
Optional Except ELT.	05	----	----	05	3	80	20	100	40	5
Practical Subjects like Georgraphy /Home Economics /Psychology etc.	04	----	02	06	2(Th) Pracitcal (As per the syllabus)	40/ 40 (As per the syllabus)	10/ 10 (As per the syllabus)	50 50 (As per the syllabus)	20/ 20 (As per the syllabus)	6
Music**	02	----	06	08	2(Th) Pracitcal (As per the syllabus)	40/ 40 (As per the syllabus)	10/ 10 (As per the syllabus)	50 50 (As per the syllabus)	20/ 20 (As per the syllabus)	8

Fashion Designing	02	---	04	06	2(Th) Practical (As per the syllabus)	40/ 40 (As per the syllabus)	10/ 10 (As per the syllabus)	50 50 (As per the syllabus)	20/ 20 (As per the syllabus)	6

***One tutorial period consisting of 20 students per batch for Compulsory English**

**** 07 student per batch for practical (Music)**

Core Audit Course: a) Indian Constitution : Sem. II

b) Environment : Sem. IV

c) Online Skill Based Program : One in each year.

Table 3

Table for Credit Conversion

Head	No. of Periods	Duration (Minutes)	Credits
Theory	02	96	1.60
	03	144	2.40
	04	192	3.20
	05	240	4.00
	06	288	4.80
Practical	01	48	0.40
	02	96	0.80
	03	144	1.20
	04	192	1.60
	05	240	2.00
	06	288	2.40
Tutorials	01	48	0.80

Table of Grades and Grade Points:

Sr. No.	Latter Grade	Grade Point	Mark Range	Performance
1	O	10	Above 90 upto 100	Outstanding
2	A+	09	Above 80 upto 90	Excellent
3	A	08	Above 70 upto 80	Very Good
4	B+	07	Above 60 upto 70	Good
5	B	06	Above 50 upto 60	Above Average
6	C	05	Above 45 upto 50	Average
7	P	04	40 upto 45	Pass
8	F	00	Below 40	Fail
9	AB	00	Absent	Absent

Computation of SGPA and CGPA

The UGC recommends the following procedure to compute the semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

i. The SGPA is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e

$$SGPA\ (Si) = \Sigma(Ci \times Gi) / \Sigma Ci$$

Where Ci is the number of credits of the ith course and Gi is the grade point scored by the student in the ith course.

ii. The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a programme, i.e.

$$CGPA = \Sigma(Ci \times Si) / \Sigma Ci$$

Where Si is the SGPA of the ith semester and Ci is the total number of credits in that semester.

iii .The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

26. Guidelines for Internal Assessment, Theory Paper and Practical:-

1. The internal assessment marks shall be awarded by the concerned teacher.

2. The internal assessment shall be completed by the College / University at least 15 days prior to the final examination of each semester. The Marks shall be sent to the University immediately after the assessment in the prescribed format.

3. **General guidelines for Internal Assessment are:**

   a) The internal assessment marks assigned to each theory paper shall be awarded on the basis of assignments like class test, attendance, home assignments, study tour, visit to educational institutions and research organizations, field work, group discussions or any other innovative practice / activity, as prescribed in the relevant syllabus.

   b) There shall be no separate / extra allotment of work load to the teacher concerned. He/ She shall conduct the internal assessment activity during the regular teaching days / periods as a part of regular teaching activity.

   c) The concerned teacher / department / college shall keep the record of all the above activities until six months after the declaration of the results of that semester.

   d) At the beginning of each semester, every teacher / department / college shall inform his / her students unambiguously the method he / she proposes to adopt and the scheme of marking for internal assessment, wherever the heads for award of internal marks are not specified in the syllabus of the paper.

   e) The teacher shall announce the schedule of activity for internal assessment in advance in consultation with HOD / Principal.

   f) Final submission of internal marks to the University shall be before the commencement of the University Theory / Practical examinations whichever is later.

27. The scope of the subjects, paper pattern for theory examination and distribution of marks shall be as prescribed by the Board of Studies of the relevant subject and as given in the syllabus.

However, broad distribution of marks for different subjects in each semester will be as under:

Subject	Theory	Internal Assessment	Practical	Internal Assessment	Total
Compulsory English.	80	20	------		100
Second Languages.	80	20	------		100
Optional subjects without practicals.	80	20	------		100
Optional subjects with practicals. (Optional)	40	10	40	10	100

28. Practical Examination:- 1. Practical examinations shall be of 3 to 8 hours duration for one or two days, depending on the subject and the number of students.

2. Each practical shall carry 40 marks. The distribution of the marks shall be as follows:

a. Record / Journal / assessment : Internal: 10 marks – Evaluated by Internal

b. Practical Performance : 10 marks – Evaluated jointly by external & internal examiners

c. Viva : 20 marks - Evaluated by external examiner

NOTES:
i. Practical performance shall be jointly evaluated by the external and internal examiner. In case of differences, the external examiner's decision shall be final.
ii. If the student fails to submit his / her certified Practical Record duly signed by the Teacher-In-Charge and the Head of the Department, he / she shall not be allowed to appear for the Practical Examination and no marks shall be allotted to the student.
iii. The practical record of every student shall carry a certificate as shown below, duly signed by the teacher-in-charge and the Head of the Department.

CERTIFICATE

Name of the college / institution _____

Name of the Department: _____

This is to certify that this Practical Record contains the bonafide record of the Practical work of Shri / Shrimati / Kumari _____ of B.A. _____ Semester _____ during the academic year _____. The candidate has satisfactorily completed the experiments prescribed by RashtrasantTukadojiMaharaj Nagpur University for the subject _____

Dated ___ / ___ / _____

Signature of the teacher who taught the examinee

1. _____

2. _____

Principal of the College

29. Saving :- Notwithstanding the lapse of Direction No 11 of 2020, the students who had taken admission as per the provisions of the said Direction shall continue to be govern by the scheme of the examination and other provisions dealing with A.T.K.T. etc. thereunder, until such students complete their graduation program. On failure to complete the course within the permissible time and attempts such students, at their option, may be absorbed in the new course, under this Direction, as per the absorption scheme. Such student shall be eligible to get exemption in the equivalent subjects/papers which he/she has passed. The decision regarding equivalence of the subject shall be that of the Dean of the Faculty taken in consultation with the Chairman of the relevant Board of studies

(Dr. Subhash R. Chaudhari)
Vice-Chancellor

Dated : 11 / 11 / 2022.

Annexure – I

List of Skill based program (Online) (All Subject)

Political Science

Sr. No.	Courses	Link
1.	Human Rights: Indian Perspective	https://onlinecourses.swayam2.ac.in/nou22_hs79/preview?.
2.	Women, Power and Politics	https://onlinecourses.swayam2.ac.in/cec22_hs11/preview?
3.	Indian Government & Politics	https://onlinecourses.swayam2.ac.in/cec22_hs32/preview?
4.	Introduction to Western Political Thought	https://onlinecourses.nptel.ac.in/noc22_hs122/preview
5.	Indian Political Thought	https://onlinecourses.swayam2.ac.in/cec22_hs14/preview?
6.	Introduction to Political Theory	https://onlinecourses.swayam2.ac.in/cec21_hs38/preview?
7.	Society and Media	https://onlinecourses.swayam2.ac.in/cec22_ge31/preview?
8.	Tribal Society	https://onlinecourses.swayam2.ac.in/nou22_hs53/preview?
9.	Gender Sensitization: Society Culture and Change	https://onlinecourses.swayam2.ac.in/nou22_hs57/preview?
10.	Constitutional Government & Democracy in India	https://onlinecourses.swayam2.ac.in/cec21_hs35/preview?

Sociology

Sr. No.	Courses	Link
1.	Human Rights: Indian Perspective	https://onlinecourses.swayam2.ac.in/nou22_hs79/preview?
2.	Women, Power and Politics	https://onlinecourses.swayam2.ac.in/cec22_hs11/preview?
3.	Society and Media	https://onlinecourses.swayam2.ac.in/cec22_ge31/preview?
4.	Tribal Society	https://onlinecourses.swayam2.ac.in/nou22_hs53/preview?
5.	Gender Sensitization: Society Culture and Change	https://onlinecourses.swayam2.ac.in/nou22_hs57/preview?
6.	Relevant course on Internshala	https://internshala.com/ .

Public Administration

Sr. No.	Courses	Link
1.	Introduction to Public Administration	https://onlinecourses.swayam2.ac.in/cec22_hs14/preview
2	State and Local Governance: Machinery & Processes	https://onlinecourses.swayam2.ac.in/arp20_sp45/preview
3	Indian Government & Politics	https://onlinecourses.swayam2.ac.in/nou22_hs32/preview?
4	Leadership and Governance in Higher Education	https://onlinecourses.swayam2.ac.in/cec22_hs19/preview
5	Human Rights : Indian Perspective	https://onlinecourses.nptel.ac.in/noc22_hs79/preview?
6	Fundamentals of Citizen Centric Governance	https://onlinecourses.swayam2.ac.in/nou22_hs46/preview
7	Urban governance and Development Management (UGDM)	https://onlinecourses.swayam2.ac.in/cec21_hs10/preview
8	Right to Information and good Governance	https://onlinecourses.swayam2.ac.in/cec22_hs01/preview
9	Gender Sensitization: Society Culture and Change	https://onlinecourses.swayam2.ac.in/nou22_hs57/preview?
10	Constitutional Government &	https://onlinecourses.swayam2.ac.in/cec21_hs3

	Democracy in India	S/p review?

Dr. Ambedkar Thought

Sr. Nn.	Courses	Link
1.	Indian Government & Politics	https://onlinecourses.swayam2.ac.in/cec22_hs32/preview?
2	Leadership and Governance in Higher Education	https://onlinecourses.swayam2.ac.in/arp20_ap19/preview
3	Human Rights : Indian Perspective	https://onlinecourses.swayam2.ac.in/nou22_hs79/preview?
4	Fundamentals of Citizen Centric Governance	https://onlinecourses.swayam2.ac.in/cec22_hs46/preview
5	Right to Information and Good Governance	https://onlinecourses.nptel.ac.in/noc22_hs01/preview
6	Gender Sensitization : Society Culture and Change	https://onlinecourses.swayam2.ac.in/nou22_hs57/preview?
7	Constitutional Government & Democracy in India	https://onlinecourses.swayam2.ac.in/cec21_hs35/preview?
8	Women, Power and Politics	https://onlinecourses.swayam2.ac.in/cec22_hs11/p review?
9	Indian Government & Politics	https://onlinecourses.swayam2.ac.in/cec22_hs32/p review?
10	Indian Political Thought	https://onlinecourses.swayam2.ac.in/cec22_hs14/p review?
11	Society and Media	https://onlinecourses.swayam2.ac.in/cec22_ge31/p review?
12	Gender Sensitization: Society Culture and Change	https://onlinecourses.swayam2.ac.in/nou22_hs57/p review?
13	Constitutional Government & Democracy in India	https://onlinecourses.swayam2.ac.in/cec21_hs35/p review?

Hindi

Sr. No.	COURSES	PLACE	LINK
1	SAHITYA SIDHANT AUR SAMALOCHANA	SWAYAM – CEC	https://www.classcentral.com/course/swayam-mhd-05-sa-ha-ta-ya-sa-tha-dha-na-ta-ora-sama-l-cana-58503
2	BHASHA VIGYAN EVAM HINDI BHASHA	SWAYAM	https://www.classcentral.com/course/swayam-mhd-07-bha-sha-va-ja-nia-na-ora-ha-ng-tha-bha-shha-58505

3	AADIKALIN EVAM MADHYAKALIN KAVYA	SWAYAM	https://www.class-central.com/course/swayam-mhd-01-aadha-ka-l-na-eva-madhha-yaka-l-na-ha-na-tha-ka-va-ya-58499
4	AADHUNIK HINDI KAVYA	SWAYAM	https://www.classcentral.com/course/swayam-mhd-02-aadha-na-ka-ha-na-tha-ka-va-ya-58500
5	HINDI UPNYAS -I (PREMCHAN KA VISHESH ADHYAYAN)	SWAYAM	https://www.classcentral.com/course/swayam-mhd-14-hindi-upanyas-1-premchand-vishesh-95310
6	UPANYAS AVAM KAHANIYAN	IGNOU	https://www.classcentral.com/course/swayam-mhd-03-upana-ya-sa-eva-kaha-na-ya-58501
7	NATAK AVAM ANYA GADYA VIDHAYEN	IGNOU	https://www.classcentral.com/course/swayam-mhd-04-na-taka-eva-anya-gadha-ya-va-dhha-e-58502
8	HINDI BHASHA OUR SAHITYA KA ITIHAS	IGNOU	https://www.classcentral.com/course/swayam-mhd-06-ha-dha-bha-shha-eva-sa-hi-ta-ya-ka-itihha-sa-58504
9	HINDI GADHYA SAHITYA: KATHA SAHITYA	SWAYAM	https://www.classcentral.com/course/swayam-ha-na-tha-gadha-ya-sa-ha-ta-ya-katha-sa-hi-te-ya-hindi-gadya-sahitya-katha-sahitya-14387
10	HINDI UPNYAS EVAM KAHANIYAN	SWAYAM	https://www.classcentral.com/course/swayam-mhd-03-upana-ya-sa-eva-kaha-na-ya-58501
11	HINDI BHASHA KA UDBHAV OUR VIKAS	SWAYAM	
12	JAYSHANKAR PRASAD OUR UNKI KAVITAYEN	SWAYAM PRABHA	
13	CREATIVE WRITING AND JOURNALISM	NIRANTAR PRAUD SHIKSHAN AANI VISTAR VIBHAG RTMNU NAGPUR	
14	CONVERSATION AND COMMUNICATION SKILL	NIRANTAR PRAUD SHIKSHAN AANI VISTAR VIBHAG RTMNU NAGPUR	
15	DRAMATICS	NIRANTAR PRAUD SHIKSHAN AANI VISTAR VIBHAG RTMNU NAGPUR	

16	E-JOURNALISM	NIRANTAR PRAUD SHIKSHAN AANI VISTAR VIBHAG RTMNU NAGPUR	
17	LANGUAGE COMMUNICATION AND BUSINESS	NIRANTAR PRAUD SHIKSHAN AANI VISTAR VIBHAG RTMNU NAGPUR	
18	TRANSALATION STUDIES	NIRANTAR PRAUD SHIKSHAN AANI VISTAR VIBHAG RTMNU NAGPUR	
19	ADVERTISEMENT AND MEDIA	SWAYAM – CEC	
20	GENDER SENSITISATION : SOCIAL CULTURE	SWAYAM – NTPEL	

History

Sr. No.	Courses	Link
1.	World Religions through their scriptures:	https://www.edx.org/xseries/harvardx-world-religions-through-scriptures
2	Creating Modern China: The Republican Period to the Present .	https://www.edx.org/course/creating-modern china-the-republican-period-to-the
3	Visualizing Japan (1850's to 1930's): Westernization, Protest, Modernity :	https://www.edx.org/course/visualizing-japan-1850s-1930s-westernization-prote
4	Globalization: Past and Future:	https://www.edx.org/course/globalization-past-and-future
5	Pyramids of Giza: Ancient Egyptian Art and Archeology:	https://www.edx.org/course/pyramids-of-giza-ancient-egyptian-art-and-archaeol

6	Sr. Secondary: History:	https://onlinecourses.swayam2.ac.in/nou22_sc34/preview
7	Tribal South and Central India :	https://onlinecourses.swayam2.ac.in/nou22_hs54/preview
8	Certificate Course in Environmental sustainability:	https://onlinecourses.swayam2.ac.in/nou22_ag16/preview
9	Cultural Studies:	https://onlinecourses.swayam2.ac.in/aic19_ss04/preview
10	Understanding Tribals:	https://onlinecourses.swayam2.ac.in/nou22_hs52/preview
11	History of English Language:	https://onlinecourses.nptel.ac.in/noc22_hs102/preview
12	Ancient Greek and Medieval Philosophy:	https://onlinecourses.swayam2.ac.in/cec21_hs15/preview
13	Academic Writing:	https://onlinecourses.swayam2.ac.in/cec22_ge44/preview
14	Academic and Research Report Writing:	https://onlinecourses.swayam2.ac.in/ntr22_ge50/preview

DIRECTION NO. 1 OF 2023

THE ADMISSIONS AND EXAMINATIONS OF STUDENTS LEADING TO THE AWARD OF THE DEGREE OF MASTER OF ARTS (CHOICE BASED CREDIT SYSTEM) (SEMESTER PATTERN), DIRECTION 2023.

Whereas, the Maharashtra Public Universities Act, 2016 (VI of 2017) (hereinafter the Act VI of 2017) has come in to force in the State of Maharashtra, with effect from 1st March 2017, repealing the Maharashtra Universities Act, 1994;

AND

Whereas, the Rashtrasant Tukadoji Maharaj Nagpur University (hereinafter the "University"), hitherto governed by the Maharashtra Universities Act, 1994, is now being governed by the Act (VI of 2017);

AND

Whereas, under section 34 (2) of the Act, VI of 2017, the university shall have only four faculties specified in said section;

AND

Whereas, the composition of each faculty in the university is to be such as may be prescribed by the university and the university has issued Direction No.27 of 2022 prescribing the composition of each faculty in the university;

AND

Whereas, the university has issued Direction No.10 of 2019 prescribing certain common conditions for all the undergraduate and post graduate programmes/courses in the university;

AND

Whereas, the University Grants Commission, New Delhi vide letter No.D.ONo.F-1-1/2015(CM) dated 8th January 2015 recommended reforms pertaining to the introduction of Choice Based Credit System at the earliest from the academic session 2015-16 to provide option to students and also seamless mobility across the institutions;

AND

Whereas, New National Education Policy has been introduced by the Government and time and again UGC and State has asked the Universities to modify the programmes in the University in order to give effect to the provisions of New National Education Policy;

AND

Whereas, the Board of Studies in different subjects of Arts in their meetings have made certain changes in the syllabus and credits and in particular have decided to have Post Graduate programe in Arts with 80 Credits and to have skill component in it in order to implement the provisions of New National Education Policy 2020;

AND

Whereas, Direction No. 31 of 2019 has lapsed by virtue of the provisions of the proviso to section 12(8) of the Act with the expiry of the period of six months as the same could not be converted in to the necessary Ordinance necessitating the issuance of a fresh Direction, incorporating the provisions of the lapsed Direction No. 31 of 2019 with suitable modifications;

Now, therefore, I Dr. Subhash R. Chaudhari, Vice-Chancellor, Rashtrasant Tukadoji Maharaj University Nagpur, in exercise of the powers conferred upon me under provision of section 12(8) of the Maharashtra Public Universities Act, 2016, do hereby issue the following Direction:-

1. This Direction shall be called **"THE ADMISSIONS AND EXAMINATIONS OF STUDENTS LEADING TO THE AWARD OF THE DEGREE OF MASTER OF ARTS (CHOICE BASED CREDIT SYSTEM) (SEMESTER PATTERN), DIRECTION 2023."**

2. This Direction shall come into force with effect from the academic year 2022 and shall be applicable to the students who shall be admitted in Semester I from the academic year 2022-23 ;

3. In this Direction unless the context otherwise requires: -

a. **"ATKT"** means "Allowed to Keep Term" in the higher semester, as per the rules herein.

b. **"Board of Studies"** means Board of studies of the University in the discipline/subjects concerned.

c. **"Course"** means a theory or practical (or the combination of theory and practical) subject, prescribed for any semester and carrying maximum and minimum passing marks, which a student, admitted to the programme of the **Master of Arts (Choice Based Credit System) (Semester Pattern)** has to study in order to become eligible for the award of the Degree under this Direction.

d. **"Credit"** means the unit by which the course work is measured. It is measured in terms of weekly class hours assigned to a Course.

e. **"Credit Point" (CP):** It is the value obtained by multiplying the Grade Point by the Credit i.e. No. of Credits assigned for the course x Grade Points secured for that course.

f. **"Cumulative Grade Point Average (CGPA)"**: CGPA refers to the Cumulative Grade Point Average weighted across all the semesters. It is obtained by dividing total number of credit points in all the semesters by the total number of credits in all the semesters.

g. **"Degree"** means the Degree of **Master of Arts (Choice Based Credit System) (Semester Pattern) which** is to be awarded to a student admitted to the programme governed by this Direction on successful completion of the programme.

h. **"Grade Letter"**: It is an index to indicate the performance of a student in a particular course/ Paper. It is the transformation of actual marks secured by a student in a course/paper. It is indicated by a Grade letter O,A,B,C,D,E and F. There is a range of marks for each Grade.

i. **"Grade Point"** : Grade Point is the weightage allotted to each grade letter depending on the marks awarded in a course/paper.

j. **"Programme"** means the academic progrogramme consisting of four semesters, each semester having one or more than one course (subject), leading to the award of the degree of **Master of Arts (Choice Based Credit System) (Semester Pattern)**

k. **"Student"** means a student admitted to the **Master of Arts (Choice Based Credit System) (Semester Pattern)** programme under this Direction.

l. **Semester Grade Point Average (SGPA)**: SGPA indicates the performance of a student in a given Semester. It is based on the total credit points earned by the student in all the courses and the total number of credits assigned to the courses/papers in a Semester.

k."University": means Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur

4. **Scope:** This Direction shall govern the Master of Arts programme in the following subjects:
History, economics, Political Science, Sociology Philosophy, Psychology, Geography, Home Economics, Women's Studies & Development, Dr. Ambedkar Thought, Public Administration, Buddhist Studies, Ancient Indian History Culture & Archaeology, Gandhian Thought, Travel & Tourism, Rashtrasant Tukadoji Maharaj Thought, English, Marathi, Hindi, Urdu, Sanskrit, Pali & Prakrit Arabic Persian, Music, Linguistics and other Indian languages.

5. The duration of the M.A. Programme shall be of two academic years consisting of four semesters with the university examinations at the end of each semester namely;
   a) M.A.Semester I examination.
   b) M.A.Semester II examination.
   c) M.A.Semester III examination.
   d) M.A.Semester IV examination.

6. The theory examination for Semesters-I, II, III and IV shall be conducted by the University and shall be held separately at the end of each semester at such places and dates as may be decided and notified

by the University and shall be held as per the schedule given in the Table below.

Table

Sr. No.	Name of the examination	Regular Admitted, & Ex Students Examination	Regular Admitted, & Ex Students Examination
1	M.A. Semester I & III	Winter	Summer
2	M.A. Semester II & IV	Summer	Winter

7. Admission & Eligibility to the Programme:

a) Subject to the compliance with the provisions of this Direction and of other ordinances in force from time to time, an applicant for admission to Semester-I examination shall have passed the Bachelor Degree examination of this university or of any other statutory recognized university as equivalent to the Bachelor Degree of this university.

b) The applicant who has passed Semester-I shall be eligible for admission to Semester-II subject to ATKT rules.

c) The applicant who has passed Semester-II shall be eligible for admission to Semester-III subject to ATKT rules.

d) The applicant who has passed Semester-III shall be eligible for admission to Semester-IV subject to ATKT rules.

8. **ATKT Rules:** The ATKT rules for admission of the students shall be as per the provisions of Direction No.10 of 2019 as renewed and or modified from time to time.

9. Without prejudice to other provisions of Ordinance No. 6, relating to the Examinations in general, provisions of Para 5, 8, 9, 10, 26, 31 and 32 of the said ordinance shall apply to every student admitted to this course.

10. The fees for the tuition, examination, laboratory and under other heads shall be as prescribed by the university from time to time.

11. (a) The scope of the subjects shall be as prescribed in the syllabus.

(b) The medium of instruction and examination shall be English/Hindi/ Marathi except language subjects.

12. The number of papers and maximum marks assigned to each paper and minimum marks / grade, an examinee must obtain in order to pass the examination shall be as prescribed in appendices 1 to 6 of this Direction.

13. The examinee at each of the examination shall have option of not being declared successful at the examination in case he / she does not secure a minimum of grade equivalent to 55% marks at the examination. This option will have to be exercised by the candidate every time the application is submitted for any of the examination. Once this option is exercised it shall be binding on the examinee and therefore the candidate will not be allowed to revoke it under any circumstances.

14. The classification of the examinee successful at the end semester examinations and at the end of final semester examination shall be as per the rules and regulations of Choice Based Credit System as prescribed in appendices, appended with this Direction.

15. The provisions of Ordinance No. 3 of 2007 for the award of grace marks for passing an examination, securing higher grade in the subject(s) as updated from time to time shall apply to the examination under this Direction.

16. The names of the successful examinee passing the examination as a whole in the minimum prescribed period and securing the grades equivalent to first and second division shall be arranged in order of merit as provided in ordinance No. 6 relating to examinations in general.

17. Successful examinees at the end of M.A, Semester-IV Examination who obtained CGPA above 7.51 shall be placed in First Division with distinction, those obtaining CGPA from 6.00 to 7.50 shall be placed in First Division, those obtaining CGPA from 4.50 to 5.99 shall be

placed in Second Division and those obtaining CGPA from 4.00 to 4.49 shall be placed in Third Division.

18. No candidate shall be admitted to an examination under this Direction, if he / she has already passed the same examination of this university or of any other university.

19. Successful examinees at the M.A. Semester I, II, III, & IV Examinations shall be entitled to receive a Statement of marks signed by the Director, Board of Examinations and Evaluation of the University and successful examinees at the end of M.A. Semester IV examination shall, on payment of prescribed fees, receive a Degree in the prescribed format, signed by the Vice-Chancellor.

20. This programme is based on Choice Based Credit System and therefore, it will also be regulated by guidelines and regulation given in appendices which are part of this Direction.

21. **Absorption scheme for failure students of the old credit based semester pattern:**

a) While switching over to New Choice Based Credit System, the failure students of old choice based credit system semester pattern will be given **Five** chances to clear the examination from the Winter 2022 of 1st & 2nd Semester, Summer 2023 of 3rd Semester and Winter 2023 of 4th Semester.

b) The candidates who have cleared first and second semester of Part I of the old Choice based Credit system Semester Pattern examination in the concerned subject shall get admission to Third Semester of the New Choice Based Credit System Semester Pattern directly. Similarly the, candidates who are allowed to keep term will also be eligible for admission to Third Semester of the New Choice Based Credit System.

c) The failure students of the old CBCS course who have exhausted the permissible chances under clause (a) shall have to appear in the matching papers as per the scheme given in Appendix-IX onward hereto.

22. If an examinee fails to pass the M.A. course, governed by this Direction, within five successive years from the date of his/her first

admission to particular programme he/she shall be declared as 'Not fit for the Course' (NFC) and he/she will not be allowed to appear further for any exam of the same course.

23. **Guidelines for Students, Supervisors and Examiners**

i) In each semester the student will have to deliver a seminar on any topic relevant to the syllabus / subject encompassing the recent trends and development in that field/ subject. The topic of the seminar will be decided at the beginning of each semester in consultation with the supervising teachers. The student has to deliver the seminar which will be followed by discussion. The seminar will be open to all the teachers of the department, invitees, and students.

ii) The students should submit the assignment properly bound in two copies to the head of the department. The said shall be evaluated by the concerned supervisor / head of the department.

iii) The marks of the Internal Assessment shall be forwarded to the university within due period through head of the Department. The record of the seminar and assignment should be preserved till the declaration of the final result.

a) The internal assessment marks shall be awarded by the concerned teacher.

b) The internal assessment shall be completed by the College / University at least 15 days prior to the final examination of each semester. The Marks shall be sent to the University immediately after the Assessment in the prescribed format.

24. **General guidelines for Internal Assessment are:**

a) The internal assessment marks assigned to each theory paper as mentioned in Appendices shall be awarded on the basis of assignments like class test, attendance, home assignments, study tour, visit to educational institutions and research organizations, field work, group discussions or any other innovative practice / activity.

b) There shall be one assignment (as described above) per Theory paper.

c) There shall be no separate / extra allotment of work load to the teacher concerned. He/ She shall conduct the internal

assessment activity during the regular teaching days / periods as a part of regular teaching activity.

d) The concerned teacher / department / college shall have to keep the record of all the above activities until six months after the declaration of the results of that semester.

e) At the beginning of each semester, every teacher / department / college shall inform his / her students unambiguously the method he / she propose to adopt and the scheme of marking for internal assessment.

f) Teacher shall announce the schedule of activity for internal assessment in advance in consultation with HOD / Principal.

g) Final submission of internal marks to the University shall be before the commencement of the University Theory / Practical examinations whichever is later.

25. Guidelines for Project work/Skill Programmes of Swayam of like nature.

Every semester student has to complete the skill component of 4 credits which can be either one course or in two parts as Project for 2 credits and Online Skill programme of 2 Credits as specified in this Direction. The supervision of the Project work and examination shall be entirely done at college level only.

26. One credit course of theory will be of one clock hour per week of 25 marks running for 15 weeks and four credit course of theory will be of four clock hours per week of 100 marks running for 15 weeks.

27. One credit course of practical will consist of two clock hours of laboratory exercise of 25 marks running for 15 weeks and four credit course of practical will consist of eight hours of laboratory exercise of 100 marks running for 15 weeks.

28. **Practical Examination**

i) Each practical carries 100 marks. For the examination, the distribution of the marks shall be as follows:

a. Record / Journal / Internal assessment	: 20 marks – Evaluated by Internal
b. Practical Performance	: 60 marks – Evaluated jointly by & Internal
c. Viva-voce	: 20 marks - Evaluated by External

NOTE: Practical performance shall be jointly evaluated by the External and Internal Examiner. In case of discrepancy, the

External Examiner's decision shall be final.

ii) Practical exam shall be of 3 to 8 hours duration for one or two days, depending on subject and number of students.

iii) The Practical Record of every student shall carry a certificate as shown below, duly signed by the teacher-in-charge and the Head of the Department.

iv) If the student fails to submit his / her certified Practical Record duly signed by the Teacher-In-Charge and the Head of the Department, he / she shall not be allowed to appear for the Practical Examination and no Marks shall be allotted to the student.

v) The certificate template shall be as follows:

CERTIFICATE

Name of the college / institution _____

_____

Name of the Department: _____

_____

This is to certify that this Practical Record contains the bonafide record of the Practical work of Shri / Shrimati / Kumari _____

_____ of M.A.: _____

_____ Semester _____ during the academic year _____ _. The candidate has satisfactorily completed the experiments prescribed by Rashtrasant Tukdoji Maharaj Nagpur University for the subject _____ _____

Dated ____/____/_____

Signature of the teacher who taught the examinee.

1._____

2._____

Head of the Department

29. General Rules and Regulations regarding pattern of question paper and choice based credit system:

I) Pattern of Question Paper

i) There will be four units in each paper.

ii) Maximum marks of each theory paper will be 80

iii) Question paper will consist of five questions, each of 16 marks.

iv) Four questions will be on four units with internal choice (One question on each unit).

v) Fifth question will be compulsory with questions from each of the four

units having equal weightage and there will be no internal choice.

II) Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA)

M.A. Program shall consist of four semesters, wherein the student has to complete certain number of credits as indicated in Table 1. Each subject (or course) has fixed number of credits. The types of subject subheads are: Core, Electives, Foundation Course, Seminar and Assignment.

Among the 80 credits which candidate needs to complete and clear for M.A.

Table 1: Credit Requirements for Post Graduate Studies-

Post Graduate	Semester	Core	Elective	Skill	Total Credits
All Subject mention in this Direction Except Practical Subject.	I	08	08	04	20
	II	08	08	04	20
	III	08	08	04	20
	IV	08	08	04	20
		32	32	16	80

Explanatory terms:

i). **Core:** Major theory papers in the concerned subject, as per respective Syllabus

ii). **Elective:** These papers will be specialization in the concerned subject, as per respective Syllabus.

iii). **Skill** : Every semester o4 credit course all kept for skill component which includes skill programmes form Swayam or similar portals or project work to be done at college level.

30. Credits: Semester Grade Point Average and Cumulative Grade Point Average:

i) It is a unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching (lecture or tutorial) or two hours of practical work / field work per week.

For example a subject with 6-2-6 (L-T-P) means it has 3 Lectures, 1 Tutorial and 6 Practical in a week. This subject will have ten credits (6x1 + 2x½ + 6x½ = 10). If a student is declared pass in a subject, then he/she gets the credits associated with that subject. Depending on the marks scored in a subject, student is given a Grade. Each grade has got certain grade points as follows:

Letter Grade	O	A+	A	B+	B	C	P	F	Ab
Grade Point	10	09	08	07	06	05	04	0	0

A student obtaining Grade F shall be considered failed and will be required to reappear for the examination.

ii) Valuation pattern:

Every credit is for 25 marks and valuation and grade points will be given as per following pattern.

Marks obtained in Theory / Practical of 100 marks	Marks obtained in Theory / Practical of 50 marks	Letter Grade	Grade point
91-100	46-50	O	10
81-90	41-45	A+	09
71-80	36-40	A	08
61-70	31-35	B+	07
51-60	26-30	B	06
41-50	21-25	C	05
= 40	=20	P	04
<40	<20	F	0
Ab	Ab	Ab	0

- **Total marks obtained by the student will be mentioned on the mark sheet along with the grade.**

iii) Computation of SGPA and CGPA

Following is the procedure to compute the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

i. The SGPA is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e

SGPA (Si) = Σ(Ci x Gi) / Σ Ci

where Ci is the number of credits of the 'i' th subject and Gi is the grade point scored by the student in the 'i' th subject i = 1,2,3……upto number of subject in that semester

Illustration for SGPA

Code	Theory / Practical	Credits	Marks Obtained	Out of	Grade Point	Grade Letter	Credit Point (Credit x Grade Point)
Core	Paper 1	4	84	100	9	O	4x9=36
Core	Paper 2	4	68	100	7	B+	4x7=28
Elective	Paper 3	4	52	100	6	B	4x6=24
Foundation	Paper 4	4	47	100	5	C	4x5=20
Skill	Paper 5	4	60	100	6	B	4X6=24
	Total	**20**					**132**
		Thus, **SGPA =132/20 = 6.6**					

ii. The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a program, i.e.

CGPA = Σ (Cj x Gj) / Σ Cj

Where, Cj in the credit for 'j' th subject Gj in the Grade Point earned for 'j' th subject

Where, 'j = 1,2,3.....total number of subject in all semesters

The SGPA and CGPA shall be rounded off to 2 decimal points and re ported in the transcripts. Ex. 7.0765 = 7.08 or 6.5168 = 6.52 etc.

Transcript (Format): Based on the above recommendations on Letter grades, grade points and SGPA and CCPA, the HEIs may issue the transcript for each semester and a consolidated transcript indicating the performance in all semesters.

31. Notwithstanding the lapse of Direction No. 31 of 2019 prior to issuance of this Direction all the actions taken by the University or the college conducting/offering programme governed by this Direction shall be deemed to have been taken in pursuance of the provisions of this Direction and hence shall be binding on all the parties.

32. Any doubt or a question arising out of interpretation or application of any provisions of this Direction shall be referred to the decision of the Vice-Chancellor whose opinion in the matter shall be final and binding on all the parties.

(Dr. Subhash R. Chaudhari)
Vice-Chancellor

Nagpur
Date : 07-01-2023

Appendices- I to VI

SCHEMES OF EXAMINATIONS OF FACULTY UNDER THE SUBJECT OF HISTORY, ECONOMICS, POLITICAL SCIENCE, SOCIOLOGY, PHILOSOPHY, PSYCHOLOGY, GEOGRAPHY, HOME ECOMOMICS, WOMEN'S STUDIES & DEVELOPMENT, DR. AMBEDKAR THOUGHT, PUBLIC ADMINISTRATION, BUDDHIST STUDIES, ANCIENT INDIAN HISTORY CULTURE & ARCHAEOLOGY , GANDHIAN THOUGHT , TRAVEL & TOURISM , RASHTRASANT TUKADOJI MAHARAJ THOUGHT, ENGLISH, MARATHI, HINDI, URDU, SANSKRIT, PALI & PRAKRIT PERSIAN, MUSIC, LINGUISTICS AND OTHER INDIAN LANGUAGES.

Appendix-I(A)

Semester I & II for M.A. Programme in all subjects except Practical Subject											
Code	The ory	Teaching Scheme (Hours/Week)			Cre dits	Examination Scheme					
		Th	Int. As s	Tot al		Durat ion in hrs,	Max. Marks		Tot al	Minimu m Passing Marks	
							Extern al marks	Intern al Assm nt			
	Pap er									Th	Int. As s
Core	1	4	--	4	4	3	80	20	100	32	08
Core	2	4	--	4	4	3	80	20	100	32	08
Electi ve/cor e	3	4	--	4	4	3	80	20	100	32	08
Electi ve/cor e	4	4	--	4	4	3	80	20	100	32	08
Skill*	5	4	--	4	4	---	--	--	100	--	--
Total		20	--	20	20		320	80	500	--	---

* Skill course can be by way of project/seminar or SWAYAM or other similar platforms and therefore minimum passing marks etc. will be determined by the agency conducting such course. In case of project the entire 100 marks project or if prescribed for 50 marks and 2 credit the examination will be completely internal only.

Note :-1.Subject code and other details as per respective syllabus

2)In addition to the theory papers, students will be required to undertake Practical Work also (6 hours per week). They have to spin 500 grams of cotton during each Semester. Otherwise they will not be allowed to appear for the examination of Gandhian Thought Course.

Appendix-I (B)

Semester III & IV for M.A. Programme in all subjects except Practical Subject

Code	Theory	Teaching Scheme (Hours/Week)			Credits	Examination Scheme				
		Th	Int. Ass	Total		Duration in hrs,	Max. Marks		Total	Minimum Passing Marks	
							External marks	Internal Assmnt		Th	Int. Ass
	Paper										
Core	1	4	--	4	4	3	80	20	100	32	08
Core	2	4	--	4	4	3	80	20	100	32	08
Elective	3	4	--	4	4	3	80	20	100	32	08
Foundation or core	4	4	--	4	4	3	80	20	100	32	08
Skill*	5	4	--	4	4	---	--	--	100	--	--
Total		20	--	20	20		320	80	500	---	---

Note :- 1) Subject code and other details as per respective syllabus

2) In addition to the theory papers, students will be required to undertake Practical Work also (6 hours per week). They have to spin 500 grams of cotton during each Semester. Otherwise they will not be allowed to appear for the examination of Gandhian Thought Course.

3) Students should filed work and Intern ship in any women's related NGO (Intern ship report) or Research Project for the M.A fourth semester is compulsory to the Women's Studies Course.

Appendix-II

Semester I &II for M. A PSYCHOLOGY Programme										
Theory	Teaching Scheme (Hrs/Week)			Credit	Examination Scheme			Total	Minimum Passing Marks 50%	
Paper	Theory	Practical	Total		Duration in Hours	External Marks	Internal Assessment		Theory	Internal Assessment
Core I	4	--	4	4	3	60	40	100	30	20
Core II	4	--	4	4	3	60	40	100	30	20
Elective I-a or Elective I-b	4	--	4	4	3	60	40	100	30	20
Elective II-a or Elective II-b	4	--	4	4	3	60	40	100	30	20
Practicum Core	--	12	12	4	3	60	40	100	30	20
Audit Course /Skill based Swayam/MOOCs (Satisfactory Grade (SF))	2	--	2	-	-	-	-	-	-	-
Total	18	12	30	20	-	300	200	500	150	100

Note:

1. Minimum passing marks in each head (Theory [External + Internal], Practical [External + Internal] will be 50 % of the maximum marks prescribed.
2. Students can opt any one paper from both Elective I and Elective II.
3. Students will have to earn satisfactory Grade (SF) in the audit course to become eligible for the award of the Degree as per R.4.6 of Direction No. 14 of 2022.

RASHTRASANT TUKDO[illegible] MAHARAJ NAGPUR UNIVERSI[illegible], NAGPUR
Choice Based Credit System (CBCS) Course Structure
Subject-Geography Faculty: Humanities
M.A. First Year Semester I (New Pattern)
with effect from: June, 2022

Appendix - III

Semester	Core Course	Paper No.	Name of the Paper	Lectures/ Week	Total No. of Lect. Per Sem.	CA	ESE	Total Marks	Credits	Minimum Passing Marks
I	GgC-101	I	Geomorphology (Core)	04	60	20	80	100	04	40
	GgC-102	II	Oceanography (Core)	04	60	20	80	100	04	40
	GgE-103	III	History of Geographical Thought (Elective)	04	60	20	80	100	04	40
	GgE104	III	Political Geography (Elective)							
	GgE-105	IV	Biogeography (Elective)	04	60	20	80	100	04	40
	GgE-106	IV	Soil Geography (Elective)							
	GgP-101	V	Practical- I (Core) Skill Based	08	60	10	40	50	02	25
	GgP-102	VI	Practical-II (Core) Skill Based	08	60	10	40	50	02	25
Semester - I Total				32	360	100	400	500	20	210

01/8/2023 01/08/2023 01/08/2023

RASHTRASANT TUKDOJI MAHARAJ NAGPUR UNIVERSITY, NAGPUR
Choice Based Credit System (CBCS) Course Structure
Subject-Geography Faculty: Humanities
M.A. First Year Semester II (New Pattern)
with effect from: June, 2022

Appendix – III

Semester	Core Course	Paper No.	Name of the Paper	Lectures / Week	Total No. of Lect. Per Sem.	CA	ESE	Total Marks	Credits	Minimum Passing Marks
II	GgC-201	I	Climatology (Core)	04	60	20	80	100	04	40
	GgC-202	II	Research Methodology (Core)	04	60	20	80	100	04	40
	GgE-203	III	Environmental Geography (Elective)	04	60	20	80	100	04	40
	GgE204		Introduction to Remote Sensing and GIS (Elective)							
	GgE-205	IV	Geography of India (Elective)	04	60	20	80	100	04	40
	GgE-206		Medical geography (Elective)							
	GgP-201	V	Practical- I (Core) Skill Based	08	60	10	40	50	02	25
	GgP-202	VI	Practical-II (Core) Skill Based	08	60	10	40	50	02	25
Semester – II Total				**32**	**360**	**100**	**400**	**500**	**20**	**210**

01/08/2023 01/08/2023 1/8/23 1/8/23

Rashtra Sant Tukadoji Maharaj Nagpur University, Nagpur.

M.A. Home Economics - NEP-2020 Based (Choice Based Credit System)

Appendix - IX

Semester I

Sr. No.	Paper	Subject code	Subject	Teaching Scheme (Hrs/Week)				Credit	Examination Scheme				
				Theory (Hours)	Practical/ (Hours)	Project/ Sessional (Hours)	Total (Hours)	1 Hr. Th. = 1 2 Hr. Pr. = 1 2 Hr. Project/	Duration (Hours)	Max. Marks		Total Marks	Min. Passing Marks
										External Th. Marks	Pract/ Internal Marks.		
1	I (Core)	1T1	Research Methods and Statistics	04	-	02	06	4	03	80	20	100	40
2	II (Core)	1T2	Textile and Clothing	04	-	02	06	4	03	80	20	100	40
3	III (Elective)	1T3	Resource Management **OR** Residential Interior Design	04	-	02	06	4	03	80	20	100	40
4	IV (Elective)	1T4	Human Development Of Early Childhood Care and Education (ECCE).	04	-	02	06	4	03	80	20	100	40
5.	Practical/ Skill Based	1P1	Textile and Clothing Practical	—	04	-	04	4	03	80	20	100	40
			Total	**16**	**04**	**08**	**28**	**20**	**15**	**400**	**100**	**500**	**200**

(Subject Code: 1-Semester I, T-Theory, P-Practical)

S Nasim

Rashtra Sant Tukadoji Maharaj Nagpur University, Nagpur.

M.A. Home Economics -NEP-2020 Based-(Choice Based Credit System)

Semester II

Appendix - IV

Sr. No.	Paper	Subject code	Subject	Teaching Scheme (Hrs/Week)				Credit 1Hr.Th.= 1 2Hr. Pr.= 1 2Hr.Project /Sessional	Examination Scheme				
				Theory (Hours)	Practical/ (Hours)	Project/ Sessional (Hours)	Total (Hours)		Duration (Hours)	Max. Marks		Total Marks	Min. Passing Marks
										External Th. Marks	Pract./ Internal Marks.		
1	I (Core)	2T1	Research Methods and Statistics	04	-	02	06	4	03	80	20	100	40
2	II (Core)	2T2	Textile and Clothing	04	-	02	06	4	03	80	20	100	40
3	III (Elective)	2T3	Resource Management OR Garbha Sanskar	04	-	02	06	4	03	80	20	100	40
4	IV (Elective)	2T4	Human Development OR Guidance and Counselling	04	-	02	06	4	03	80	20	100	40
5	Practical/ Skill Based	2P1	Textile and Clothing Practical	—	04	-	04	4	03	80	20	100	40
			Total	16	04	08	28	20	15	400	100	500	200

(Subject Code: 2-Semester II, T-Theory, P-Practical)

S. Nasim

Appendix - IV

Rashtra Sant Tukadoji Maharaj Nagpur University, Nagpur.

M.A. Home Economics -NEP-2020 (Choice Based Credit System)

Semester -III

					Teaching Scheme (Hrs/Week)			Credit		Examination Scheme			
Sr. No.	Paper	Subject Code	Subject	Theory (Hours)	Practical (Hours)	Project/ Sessional (Hours)	Total (Hours)	1Hr.Th.= 1 2Hr. Pr.=1 2Hr.Project /Sessional	Duration (Hours)	Max. Marks		Total Marks	Min. Passing Marks
										External Th. Marks	Pract./ Internal Marks.		
1	I	3T1	Core -Food and Nutrition	04	-	02	06	4	03	80	20	100	40
2	II	3T2	Core- Consumer and The Market	04	-	02	06	4	03	80	20	100	40
3	III	3T3	**Elective 1(a)**Home Science Extension Education **OR** **Elective 1(b)** Housing and Interior. **OR** **Elective 1(c)** Gender and Development	04	-	02	06	4	03	80	20	100	40
4	IV	3T4	Elective- Family Dynamics **OR** Communication Technologies in Extension (Elective)	04	-	02	06	4	03	80	20	100	40
5.	Practical/Skill Based	3P1	Food and Nutrition(Practical)	--	04		04	4	03	80	20	100	40
			Total	**16**	**04**	**08**	**28**	**20**	**15**	**400**	**100**	**500**	**200**

(Subject Code: 3-Semester III, T-Theory, P-Practical)

40

Appendix -IV

Rashtra Sant Tukadoji Maharaj Nagpur University, Nagpur.
M.A. Home Economics -NEP-2020 Based (Choice Based Credit System)
Semester IV

Sr. No.	Paper	Subject Code	Subject	Teaching Scheme (Hrs/Week)				Credit	Duration (Hours)	Examination Scheme			
				Theory (Hours)	Practical (Hours)	Project/Sessional (Hours)	Total (Hour)	1Hr.Th.= 1 2Hr. Pr.=1 2Hr.Project/ Sessional		Max. Marks		Total Marks	Min. Passing Marks
										Extern ITh. Marks	Pract/ Internal Marks		
1	I	4T1	Core- Food and Nutrition	04	-	02	06	4	03	80	20	100	40
2	II	4T2	Core- Consumer and The Market	04	-	02	06	4	03	80	20	100	40
3	III	4T3	Elective 1(a) Home SafenceExtension Education OR Elective 1(b)Housing and Interior OR Elective 1 (c) Entrepreneurship Development	04	-	02	06	4	03	80	20	100	40
4	IV	4T4	Elective-Family Dynamics OR Family Relations and Family Welfare	04	-	02	06	4	03	80	20	100	40
5	Practical/Skill Based	4P1	Food andNutrition Practical	-	04	-	04	4	03	80	20	100	40
			Total	16	04	08	28	20	15	400	100	500	200

(Subject Code: 4-Semester IV, T-Theory, P-Practical)

Post Graduate Degree in M.A Economics

Implementation from the Academic Session 2022-23

Teaching and Examination Scheme

M.A (Economics) Programme : Semester - 1

Appendix-V (A)

Course Code	Theory Paper	Teaching Scheme (Hours/Week)			Credits	Examination Scheme			Total	Minimum Passing Marks	
		Theory	Internal Ass.	Total		Duration in Hrs.	Max. Marks: External Marks	Max. Marks: Internal Ass.		Theory	Internal Ass.
	Core Course Subjects:										
	1. Micro Economic Theory – I	04	-	04	04	03	80	20	100	32	08
	2. Macro-Economic Theory – I	04	-	04	04	03	80	20	100	32	08
	I. Elective Course Subjects: (Choose Any One)					03	80	20	100	32	08
	1. Indian Economy- Issues & Policies	04	-	04	04						
	2. Mathematics for Economics	04	-	04	04						
	II. Elective Course Subjects: (Choose Any One)					03	80	20	100	32	08
	1. Agricultural Economics	04	-	04	04						
	2. Industrial Economics	04	-	04	04						
	Total	16		16	16		320	80	400	32	08
	III. Elective Courses (Compulsory):										
	1. Skill Based Program	-	02	02	02	2	-	50	50	-	25
	2. Activity Based Learning	-	02	02	02	2	-	50	50	-	25
	Total	16	04	20	20			-	500	-	-

Note: The 3rd Elective Course is compulsory for all Semester Post-Graduate programme in M.A (Economics). Skill based Course (2 Credit) and Activity based learning (2 Credit) in this elective will carry 50 marks each and total allotted 4 credits. Moreover, the functioning of this third elective course will be at the college level course (CLC).

M.A (Economics) Programme : Semester - II

Appendix -V (B)

Course Code	Theory Paper	Teaching Scheme (Hours/Week)			Credits	Examination Scheme			Total	Minimum Passing Marks	
		Theory	Internal Ass.	Total		Duration in Hrs.	Max. Marks External Marks	Internal Ass.		Theory	Internal Ass.
	Core Course Subjects: 1. Micro Economic Theory – II	04	-	04	04	03	80	20	100	32	08
	2. Macro-Economic Theory - II	04	-	04	04	03	80	20	100	32	08
	I. Elective Course Subjects: (Choose Any One) 1. Economics of Micro-finance	04	-	04	04	03	80	20	100	32	08
	2. Applied Econometrics	04	-	04	04						
	II. Elective Course Subjects: (Choose Any One) 1. Statistics for Economics	04	-	04	04	03	80	20	100	32	08
	2. Natural Resource Economics	04	-	04	04						
	Total	16		16	16		320	80	400	32	08
	III. Elective Courses (Compulsory): 1. Skill Based Program	-	02	02	02	2	-	50	50	-	25
	2. Project Work	-	02	02	02	2	-	50	50	-	25
	Total	16	04	20	20			-	500	-	-

M. A. Indian Music Examination (C.B.C.S.)
Semester Pattern
Effective from 2022 – 23 progressively

Appendex - VI

The Course of Study and the Scheme of Examination

Year /Sem	Subject	Paper	Title of the Paper	Ins. Hrs / Week	Credit	Maximum Marks		
						CIA	Uni. Ex.	Total
I Year I Sem	Core	1P1	Practical Test	4	4	20	80	100
	Core	1P2	Mazlis Performance	4	4	20	80	100
	Core	1T3	Theory Paper I (क्रियात्मक शास्त्र)	4	4	20	80	100
	Core	1T4	Theory Paper II (इतिहास व शास्त्राभ्यास)	4	4	20	80	100
	Elective (Skill Based)	1T5 (A)	Introduction to Ghazal	4	4	20	80	100
	Elective	1T5 (B)	Course from SWAYAM			20	80	100
			Cumulative Sem I Credits	20	20			500
I Year II Sem	Core	2P1	Practical Test	4	4	20	80	100
	Core	2P2	Mazlis Performance	4	4	20	80	100
	Core	2T3	Theory Paper I (क्रियात्मक शास्त्र)	4	4	20	80	100
	Core	2T4	Theory Paper II (संगीतातील विज्ञान व प्रयोगशास्त्र)	4	4	20	80	100
	Elective (Skill Based)	2T5 (A)	Introduction to Sound Technology		4	20	80	100
			Course from SWAYAM			20	80	100
			Cumulative Sem II	20	20			500
	Core	3P1	Practical Test	4	4	20	80	100

Appendix - VI

II Year III Sem	Core	3P2	Mazlis Performance	4	4	20	80	100
	Core	3T3	Theory Paper I (क्रियात्मक व उपयोजित शास्त्र)	4	4	20	80	100
	Core	3T4	Theory Paper II (संगीतातील स्थित्यंतरे)	4	4	20	80	100
			Internship		2			50
	Elective (Skill Based)	3T5 (A)	Theoretical Introduction to Instrumental Music (स्वर वाद्य)	4	2	10	40	50
	Elective	3T5 (B)	Course from SWAYAM		4			100
			Cumulative Sem III Credits	20	20			500
II Year IV Sem	Core	4P1	Practical Test	4	4	20	80	100
	Core	4P2	Majlis Performance	4	4	20	80	100
	Core	4T3	क्रियात्मक व सौंदर्य शास्त्र	4	4	20	80	100
	Core	4T4	संगीतातील सं ोधन	4	4	20	80	100
	Elective (Skill Based)	4T5 (A)	संगीत निर्दे न end Dissertation	4	4	20	80	50 50
	Elective	4T5 (B)	Course from SWAYAM	4				100
	Elective	4T5 (C)						
			Cumulative Sem IV	20	20			500

Semi-detailed

Nagalwar

21/8/23

RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY
"(Established by Government of Central Provinces Education Department by Notification No. 513 dated the 1st of August, 1923 & presently a State University governed by Maharashtra Public Universities Act, 2016 (Mah. Act No. VI of 2017).)"

DIRECTION NO. 45 OF 2023

CONDUCT OF END SEMESTER EXAMINATIONS BY THE CONDUCTED/AFFILIATED COLLEGES/INSTITUTIONS OF THE UNIVERSITY, DIRECTION 2023.

Whereas, Maharashtra Public Universities Act, 2016 (VI of 2017) (hereinafter the Act) has come into force from 1st March 2017 and the same applies to the Rashtrasant TukadojiMaharaj University (the University);

AND

Whereas, the University has been conducting various undergraduate programs in all the four faculties of the University through its conducted and affiliated colleges/institutions;

AND

Whereas, the academic programs offered/approved by the University are regulated by framing Ordinances/Directions in respect of the eligibility for admission to the programme, the structure and duration of the programme, the chargeable fees from the learners, conduct of end semester/annual examinations leading to the award of respective degrees to be conferred by the University through the convocations to be organised by the University;

AND

Whereas, Ordinance no. 19/2008 of the University makes provision for appointment of paper setters /examiners /moderators / Chief Supervisor/ Internal Supervisor and other persons by the University and their duties and responsibilities in respect of conduct of University Examinations and other matters which are ancillary and incidental to the conduct of University examination;

AND

Whereas, the issue of assigning the responsibility of conducting some of the end semester/ annual examinations in respect of the various programmes offered /approved by the University to the conducted / affiliated college/ institutions was under the active consideration of the University for some time;

AND

Whereas, the Board of Deans in its meeting held on 19th July 2021, vide item no. 40 approved the scheme of examinations in respect of the odd semesters of all the non-professional under graduate programmes offered by the University to be conducted at the college level, prepared by a Committee under the chairmanship of Hon'ble Vice Chancellor;

AND

Whereas, the Academic Council vide its decision on item no. 1(C) n its meeting held on 9th August 2021 approved the scheme of the conduct of end semester examinations for the odd semesters of non-professional under graduate programmes by the affiliated/conducted colleges of the University and further decided to refer the matter to the Management Council of the University for taking appropriate policy decision as well as other decisions regarding financial matters in entrusting the responsibility of conduct of examinations for the Odd semesters by the colleges of the University;

AND

Whereas, the Management Council of the University in its meeting dated 13th August 2021 vide item no. 94 (C)(2) resolved to constitute a committee under the Chairmanship of Dr. Sanjay Kavishwar for determining the modalities and parameters to assign the responsibility of conducting end semester examinations of odd semesters, i.e. 1st, 3rd, 5th and so on, by the colleges of the University and the said Committee after considering all the issues pertaining to conduct of University examination at college level for odd semesters of Under graduate programmes had submitted its detailed report, which was placed before the Management Council in its meeting held on 22nd September 2021 vide item no. 143 and the Management Council considered and approved the recommendations of the said committee;

AND

Whereas, in the meeting of Academic Council held on 5th June 2023, it was resolve that the time table of the examination of odd semester examination to be conducted by the colleges under this direction shall be prepared and published by the University and not by the examination committee of the respective college, so also the question papers will be provided by the University in order to have uniformity in the colleges;

AND

Whereas, the existing ordinances/Directions governing various under graduate programmes offered/approved by the University in its Four faculties provide for conduct of end semester examinations for the Odd semesters by the University, it has become necessary to issue a separate Ordinance overriding the provision of respective ordinances/Directions providing for conduct of end semester examinations for Odd semesters of the concerned programmes exclusively by the University but since Ordinance making is a time consuming process and as per the above said decision of the Management Council the end semester examinations for the 1st Semesters of all the Under graduate programmes except the professional programmes for which the students have been admitted in the Academic year 2021-22 is to be conducted by the colleges

at the end of the 1st semester which is approaching in immediate near future, there is an exigency to issue a suitable Direction as contemplated by the provisions of section 12(8) of the Act for implementing the above said decision of the Management Council of the University;

AND

Whereas, Direction No. 1 of 2022 entitled "Conduct of End Semester Examinations by the Conducted/Affiliated Colleges/Institutions of the University, 2022" has been issued by the University on 11/01/2022 but the said Direction does not incorporate the revised decision of the Management Council of the University on the point of sharing of the examination Fee, charged from the students, between concerned college/institution and the University, vide Item No. 4 in its meeting dated 3rd December 2021, necessitating modification in the relevant provisions of Direction no. 1 of 2022 which requires repeal of the said Direction and issuance of a replacement Direction;

AND

Whereas, the Government Resolution No. HSC 1092/58878/(205)/V.S.-5, dated 19th November, 1993 grants approval to the B.P.E. degree course as equivalent to the B.A., B.Com. and B.Sc. courses of the then Nagpur University.

AND

Whereas, the B.P.E. course in the University is now renamed as B.P.E.S. course, and hence there is a necessity of including B.P.E.S. in the 'Programme' mentioned in the Direction.

AND

Whereas, the Direction No. 9 of 2023, entitled, 'Conduct of End Semester Examinations by the Conducted/Affiliated Colleges/Institutions of the University, Direction-2023' was issued and the same has lapsed by virtue of the provision of the proviso to Section 12(8) of the Act, it has become necessary to issue a fresh Direction incorporating the provisions of the said lapsed Direction with necessary modifications in view of the decision of the Academic Council taken in its meeting dated 5.6.23.

Now, therefore, I, Dr. Subhash R. Chaudhari, Vice-Chancellor, in exercise of my powers under section 12(8) of the Act do hereby issue the following new Direction;

1. This Direction may be called **"CONDUCT OF END SEMESTER EXAMINATIONS BY THE CONDUCTED / AFFILIATED COLLEGES / INSTITUTIONS OF THE UNIVERSITY, DIRECTION-2023.."**

2. This Direction shall come into force from the date of its issuance and the end semester examinations for odd semester of the non-professional undergraduate programmes shall be conducted by the colleges/institutions as per the provisions of this Direction. However, in the academic year 2021-22 end semester examinations for the Ist semester only, in the academic year 2022-23 examinations for the Ist and IIIrd semesters only and in the academic year 2023-24 and onward the examinations for the 1st, 3rd and 5th semesters shall be conducted by the colleges/Institutions.

3. In this Direction unless the context requires otherwise the words and phrases shall have the meaning assigned herein:-

   i. **"Cluster of Institutions"** means a group of colleges which have come together for the purpose of conducting the end semester examinations, in terms of the provisions of this Direction.

   ii. **"College"** means any conducted/affiliated college/institution of the University offering any undergraduate programme for the odd semesters of which the end semester examinations is to be conducted by the said college/institution.

   iii. **"Course"** means theory or practical subject the contents of which, process of evaluation and its parameter are specified in the syllabus of the program.

   iv. **"Examination Committee"** means a committee constituted as per the provisions of this Direction for the purpose of conduct of end semester examinations including the supplementary examinations

and revaluation and other incidental matters in respect of Odd semesters of the under graduate programmes.

v. **'Programme'** includes B.A., B.A. (R.S.), B.Sc., B.Sc. (Home Science), B.Sc. (I.T.), B.Sc. (Forensic Science), B.Sc.(Finance), B.Com., B.B.A., B.C.C.A., B.C.A., B.C.T., B.F.D., B.I.D., B.T.S., B.J.D., B.A.E.S.T., B.S.W., B.Lib., B. Voc., B.Sc. (Data Science), B.Sc. (A.I.)and B.P.E.S. but excludes all the under graduate programmes in all the four faculties of the University for which admissions to the 1st semester (and lateral entry) are done through the centralized admission process (CAP) conducted by the State Government of Maharashtra.

vi. **'Subject Expert'** means a teacher including, a teacher appointed on contractual basis or Clock Hour Basis, having sufficient professional or teaching experience in the relevant subject.

4. Notwithstanding anything to the contrary contained in any Ordinance/Statute/Direction the end semester examinations of the odd semesters of all the under graduate programmes in which admissions to the 1st semester or any other entry level semester is not done through the centralized admission process conducted by any agency of the state government shall be conducted by the colleges offering such a undergraduate programmes. The modalities for conduct of end semester examinations by the respective colleges shall be as per the provisions of this Direction herein below.

However, the provisions of Ordinance No. 19/2008, providing for appointment of paper setters/examiners/moderators/Chief Supervisor/Internal Supervisor and other persons by the University and their duties and responsibilities in respect of conduct of University Examinations and other matters which are ancillary and incidental to the conduct of University examination, to the extent they are not inconsistent with the provisions of this Direction shall also be applicable in respect of end semester

examinations conducted by the affiliated/ conducted colleges/institutions under this Direction.

5. **Coverage and Scope**

a) The colleges/institutions offering non professional undergraduate programmes for which admissions in the first semester (and lateral entry) are not done through the centralized admission process conducted by the State Government of Maharashtra shall be responsible for the conduct of the end semester examinations including supplementary examinations for the odd semesters of the concerned programme these programmes specially include B.A., B.A. (R.S.), B.Sc., B.Sc. (Home Science), B.Sc. (I.T.), B.Sc. (Forensic Science), B.Sc.(Finance), B.Sc. (Data Science), B.Sc. (A.I.) B.Com., B.B.A., B.C.C.A., B.C.A., B.C.T., B.F.D., B.I.D., B.T.S., B.J.D., B.A.E.S.T., B.S.W., B.Lib., B. Voc. And B.P.E.S. programmes. The responsibility to conduct examinations includes both theory as well as practical examinations.

b) In conducting the end semester examinations by the colleges/institutions it shall be mandatory, notwithstanding anything contrary herein, to comply scrupulously with the provisions of the Maharashtra Public Universities Act, 2016 and the Ordinances and Directions issued by the University, from time to time, in respect of conduct of the end semester examinations by the colleges/institutions.

c) It shall be mandatory for the teachers working in the colleges conducting the end semester examinations to perform all the duties in respect of conduct of the examinations as if the examinations are conducted by the University.

6. The colleges/Institutions which have to conduct the end semester examinations including the supplementary examinations for the Odd

semesters of the non professional undergraduate programmes shall follow the procedure and take the necessary steps as mentioned herein below;

A. Examination Forms, Fees and Hall Tickets

a) The procedure for filling up the examination forms by students shall continue as it is in practice. It shall be the responsibility of the colleges/institutions to receive forms from the students and submit the same to the university within the prescribed time

b) The last date for submission of examination form and fine in case of late submission of form will be as per the circulars notified by the University from time to time.

c) The examination fees to be paid by the student and fine in case of late submission of form shall be prescribed by the University from time to time.

d) On receipt of examination forms, the college shall submit the forms to the University within prescribed date along with 25% of total examination fees, Remaining 75% of total examination fees to be retained by the college for operating expenses to conduct examinations.

e) The University shall process the examination forms in due course of time and provide hall tickets to the college at least 1 week before commencement of examination.

f) The colleges/Institutes shall distribute the hall tickets to the students who have filled the examination forms

g) If there are any grievances related to discrepancies in hall tickets, the Examination Section of the University shall address the same on priority basis and resolve them before actual commencement of examination.

B. **Examination Committee**

a) Each college /Institution conducting examination on behalf of the University shall have a duly constituted 'Examination Committee' which shall consist of following members:-

i. Principal of the College as a Chairperson of the Committee

ii. Minimum Two – Three teachers nominated by the Principal

iii. Minimum One Non-Teaching staff member nominated by the

Principal

iv. Examination In-charge nominated by the Principal who will act as a Member-Secretary

b) The teachers nominated in Examination Committee are eligible to be appointed evaluators and Moderators of answer books.

c) The 'Examination Committee' shall carry out all the functions related to examination such as evaluators, conduct of examination, maintaining record of attendance of examinees, ensuring timely evaluation of answer books, preparing results and submitting the marks to the University, and preserving all records of examination for minimum 3 years after completion of examination.

C. **Time-Table**

a) The University shall provide time table for conduct of winter examinations at least 20 days before the commencement of the examination. This shall be published on the examination portal of the University.

b) The college is required to conduct the actual examination (Theory and Practical) as per the above time table.

c) The Examination Committee shall also take effort to communicate university time table with the students by other suitable means.

d) The delivery of question papers to all the examination centers will be online through email from the university to the authorized email of the chairman of the examination committee at the concerned examination center.

D. Answer Books

a) The colleges/Institutions shall print the requisite number of answer-books of 16 pages each on A-4 size paper. The cover page of answer-book shall contain –

a. Name and Logo of the College

b. Space for Name of Examination, Name of Subject, date of examination, Roll No., Enrolment No., Center No., signature of invigilator, etc.

c. Separate table for marking

d. No answer books supplied by the university shall be used for either theory examination conducted by the college or the practical examinations by the college under this Direction.

E. Evaluation of Answer Books

a) The Examination Committee shall prepare a comprehensive list of examiners for theory papers and practicals.

b) In case, a particular college does not have adequate number of teachers, the examiners/moderators can be appointed from other colleges.

c) In case of practical, the Examination Committee shall appoint external examiners from other colleges. Remuneration/Conveyance Allowance to such examiners shall be paid according to the University norms and shall form a part of the operating expenses of conducting an examination by the college and to be born by the college/institution.

d) The answer-books will be evaluated by designated examiners in the college premises only and they will not be allowed to take answer-books out of the college premises.

e) There should be a designated evaluation center within the college premises and entry in such a center should be restricted only for the persons authorized by the Examination Committee.

f) The evaluation work needs to be completed within 10 days from the date of examination for each subject.

g) The Examination Committee shall ensure that the marks obtained by students appearing in examination are submitted to the University within 15 days from the last date of examination.

F. Revaluation of answer books

a) A student, not satisfied with the marks, can apply for revaluation of answer-book/s for maximum of two papers within 7 days of declaration of result in a form prescribed by the college.

b) A student shall obtain the prescribed form of application for revaluation from college and submit the same to the college along with a fee of Rs. 150 per paper. The revaluation fee shall be retained by the college.

c) The college shall send the information about application for revaluation to the University in a format provided by the University.

d) The University shall then provide a separate link for resubmission of marks by college for students who have applied for revaluation.

e) The Examination Committee shall appoint two examiners other than original examiner for revaluation. In case of non-availability of adequate number of teachers, the examiners can be appointed from other colleges. The task of revaluation of answer-book/s needs to be completed within 10 days of the last date for receipt of application for revaluation.

f) The college, shall then resubmit the average marks awarded by two evaluators. This shall be done within 10 days of the last date for receipt of application for revaluation.

g) The University, after processing these marks shall declare the result and provide the revised mark list to college within 10 days of submission of revised marks by the college.

H. Supplementary Examination for Odd Semester Examination

a) The application form for supplementary examination will be provided by the college.

b) A failure student will be required to fill up the form for supplementary examination to the college within 10 days of declaration of result along with the examination fee as per University norms.

c) The college shall submit the examination forms to the University within prescribed date.

d) The University shall prepare and communicate the time-table for supplementary examination.

e) The schedule for supplementary examination shall commence within 20 days of the last date of receipt of applications for supplementary examination.

f) The Examination Committee shall conduct the supplementary examination of applicants as per declared Time-Table declared by the

University and submit the marks to the University within 10 days of the last date of re-examination.

g) The University shall then process the submission and declare results of supplementary examination within 15 days of receipt of marks from college.

h) All such mark lists will be issued with a mention of 'Supplementary Examination'.

i) The procedure for revaluation during supplementary examination shall be the same as mentioned above.

j) The students who are declared successful in the supplementary examination shall be eligible to take admission in the next higher class as per the norms of the A.T.K.T. of relevant examination as given in the direction. For the purposes of admission in next class students passed in regular exams and in supplementary exam shall be treated at par.

I. Preservation of Examination Records

a) The college shall submit the marks for all subjects to the University. The University shall provide an 'Upload' facility for the same on its portal.

b) The college shall preserve all examination records such as all attendance lists, list of evaluators and moderators, copies of marks submitted to University, records related to revaluation and supplementary examination, etc. at least for a period of three years from the date of examination.

c) The college shall preserve all answer-books for a period of minimum TWO years from the date of examination.

J. Provision for 'Cluster of Institutions'

a) In order to maintain high academic standards and to achieve scale of economy, two or more institutions may come together and form a cluster for conducting University Examinations.

b) The participating institutions are required to mutually sign a document of forming a cluster mentioning the composition of 'Examination Committee' and functioning of cluster. A duly signed copy of this document is required to be submitted to the University.

c) In case a cluster is formed, the 'Examination Committee' will have to be formed for the cluster. In such a committee, there shall be equal representation of teachers from all the participating institutions and the Chairman will be the Principal of any of the participating institutions to be decided on mutual agreement of these institutions.

d) The representative of each participating institution will act as 'Examination In-charge' for his/her college.

e) The answer-books will be required to be printed individually by the participating institutions.

f) In case of a cluster, Evaluation of Answer-Books can be done centrally for all participating institutions

h) However, marks are required to be submitted to the University individually by participating institutions.

i) The financial matters related to printing, evaluation of answer-books, etc. need to be agreed upon mutually by participating institutions.

K. **Role of University**

a) Processing of Examination forms and generating Roll Nos.

b) Providing Hall tickets to college

c) Providing Time table for examination and supplementary examination.

d) Providing Question Papers.

e) Providing user friendly interface on the portal for submission of marks

f) Providing prescribed formats, wherever necessary

g) Timely processing and declaration of results

h) Providing Mark lists to colleges in timely manner

i) Monitoring the examination at college in order to maintain quality, transparency and fairness

L. **Monitoring of Examinations and Declaration of Results by the University**

a) The University shall establish a robust mechanism to ensure that the colleges are conducting examination in fair and transparent manner and are maintaining high standards of quality.

b) Declaration of result and issuance of mark list shall be the sole responsibility of University.

c) After declaration of result, the University shall provide mark lists of students to the college within maximum 15 days.

d) A random check would be more effective for this purpose.

i. After declaration of results, the University shall call for specific answer-books on a day's notice; OR

ii. After declaration of results, the University shall send a Supervisor with specific queries to the college to check some specific answer-books.

M. Grievance Redressal

a) A student or teacher having any grievance with respect to conduct of examination at college/institution shall be addressed to 'The Director, Board of Examinations and Evaluation'(BOEE).

b) The Director, BOEE shall address the grievance in accordance with the provisions of The MPU Act, 2016 and other ordinances.

N. **Malpractices**

a) Any malpractices or fraudulent activities observed or reported shall be forwarded to the University's Disciplinary Action Committee along with available evidences for further investigation and necessary action.

O. Declaration of result of the final semester of the programme.

Notwithstanding anything to the contrary herein and also the provisions of other Directions/Ordinances, governing the academic programmes, the norms regarding declaration of result of final semester of each programme shall be published by the University separately, in the due course of time.

Date: 31-10-23
Place: Nagpur

(Dr. Subhash R. Chaudhari)
Vice-Chancellor