

Masters of Science (M.Sc.) PROGRAM STRUCTURE

& Program Handbook under NEP-2020

FACULTY OF SCIENCE

Masters of Science (M.Sc.)



**M.C.E. Society's
ABEDA INAMDAR SENIOR COLLEGE OF ARTS,
SCIENCE AND COMMERCE (AUTONOMOUS), PUNE-01**

With effect from 2023-2024

M.C.E. Society's
ABEDA INAMDAR SENIOR COLLEGE OF ARTS, SCIENCE AND
COMMERCE (AUTONOMOUS),
AZAM CAMPUS, CAMP, PUNE – 411001
affiliated to Savitribai Phule Pune University, Pune

PROGRAM STRUCTURE
&
Program Handbook
under NEP-2020

For the Award of

- Masters of Science (M.Sc.) degree in
- Analytical Chemistry
 - Organic Chemistry
 - Microbiology
 - Mathematics
 - Computer Science

Under the Faculty of Science and Technology

With effect from 2023-2024

M.Sc. PROGRAM STRUCTURE CONTENTS LIST

Sr. No.	Title	Page No.
1.	Introduction	5
2.	Objectives of Program	5
3.	Eligibility	6
4.	Medium of Instruction	6
5.	Courses with Practical	6
6.	Scheme of Credits a) For M.Sc. Analytical Chemistry, Organic Chemistry, and Microbiology b) For M.Sc. Mathematics c) For M.Sc. Computer Science	7
7.	Scheme of Number of Courses as per Credits	9
8.	Duration	10
9.	Attendance	10
10.	College Terms	10
11.	Methods of Evaluation and Passing Criteria	10
12.	Structure Of Examination (CIE and End Semester Examination) Mark Scheme for PG Science Program:	11
13.	Continuous Internal Evaluation (CIE)	11
14.	Duration of End Semester Examination (External)	12
15.	Standard of Passing	12
16.	A.T.K.T. Rules	13
17.	Completion of Degree	13
18.	Performance Indices	14
19.	Result and Percentage Calculation of a Given CGPA	14
20.	Ordinance	15
21.	Verification and Revaluation	15
22.	Structure of Transcript	16

23.	Grade Improvement	16
24.	Terms of Course	17
26.	End Semester Examination Question paper pattern	17

List of Tables

Table	Title of Table	Page No.
Table 1	Semester wise credit distribution for two-year PG programe after three-year B.Sc.	7
Table 2	Semester wise credit distribution for One-year PG programe after four-year B.Sc.	7
Table 3	Semester-Wise Number of Courses for Two-year PG Science M.Sc Analytical, Organic chemistry and Microbiology Programme (NEP-2020 w.e.f 2023-24)	9
Table 4	Semester-Wise Number of Courses for Two-year PG Science M.Sc Mathematics Programme (NEP-2020 w.e.f 2023-24)	9
Table 5	Semester-Wise Number of Courses for Two-year PG Science M.Sc. Computer Science Programme (NEP-2020 w.e.f 2023-24)	9
Table 6	Structure of Examination Mark Scheme for PG Science Programme (NEP 2023 Pattern)	11
Table 7	CIE for 4 credits theory paper	11
Table 8	CIE for 4 credits practical paper	12
Table 9	Criteria for Paper Setting of Internal Assessment and End Semester Examination	12
Table 10	Conversion of Marks into corresponding grade and GP	13
Table 11	Conversion of marks into Grade and Grades Points	15
Table 12	Method of Calculation of Credit Points	16
Table 13	End Semester examination question paper format	17

1) INTRODUCTION:

The Two-year M.Sc. Degree Course under NEP (2023 pattern) will be introduced in the following order:

a. First Year M.Sc. 2023-2024

b. Second Year M.Sc. 2024-2025

The One-year M.Sc. Degree Course (2023 pattern) will be introduced in the following order:

Second Year M.Sc. 2027-2028

Two Years M.Sc. Degree Course will consist of four semesters. The first year (Semester I and II) and Second Year (Semester III and IV). The NEP-2020 Based Credit System will be followed and examination will be held at the end of each semester.

The specializations of Two-year M.Sc. Degree are:	The specializations of One-year M.Sc. Degree are:
1. Analytical Chemistry	1. Analytical Chemistry
2. Organic Chemistry	2. Organic Chemistry
3. Microbiology	3. Microbiology
4. Mathematics	4. Mathematics
5. Computer Science	5. Computer Science

The final degree shall be awarded by Savitribai Phule Pune University, Pune.

2) Objectives of PG programme:

- The objective of Master of Science, can vary depending on the specific field of study. However, in general, the objectives of an MSc program are as follows:
- The primary objective of an MSc program is to provide students with advanced knowledge and skills in their chosen field of study. It aims to deepen their understanding of the subject matter and equip them with specialized expertise.
- MSc programs often emphasize research and analysis. Students are encouraged to engage in independent research, critical thinking, and data analysis to develop a deeper understanding of their field. They may be required to complete a thesis or research project as part of their degree.
- MSc programs aim to enhance students' professional development by equipping them with the practical skills and knowledge needed for their future careers. This can include hands-on training, industry-specific knowledge, and exposure to real-world challenges and problem-solving.
- For students interested in pursuing further study or research, an MSc program serves as a foundation for higher-level academic pursuits. It provides the necessary research experience and academic rigor required for admission into doctoral programs or other advanced research positions.

3) ELIGIBILITY:

A) For Two-year M.Sc. Degree:

- a) Candidate shall be admitted to the First Year of the M.Sc. Degree Course **under NEP-2020**) if he/she has passed **graduation in a specific subject** or had it as one of the subjects in the Final year of graduation for students with general B.Sc.
- b) Candidate shall be admitted to the First Year of the M.Sc. Degree Course **under NEP-2020**) if he/she has passed **specific subject as major subject in** Three-year degree under NEP-2020 **or** had it as one of the subjects as minor in three-year B.Sc. degree under NEP-2020.
- c) For admission to **M. Sc. (Mathematics)** -Bachelor of Science with Mathematics or/Mathematics at least upto second year B.E./B.Tech. /B.Sc.
- d) For admission to **M.Sc. (Computer Science)** - Bachelor of Computer Science (BCS) with 50 % marks and 45% marks for reserved category.
OR
B.Sc. (Computer Science) OR Bachelor of Engineering in Computer Science/Information Technology/Electronic Telecommunication with 50 % marks OR B. Voc. in software Development, Data Science, Information Technology with 50 % marks
OR
B.Sc. degree with Computer Science as Principal subject or Computer Science as one of the subjects at T.Y.B.Sc. level for student with general B.Sc. with 50% marks.

B) For One-year M.Sc. Degree:

- a) Candidate shall be admitted to the direct one-year M.Sc. Degree Course (Second year / Sem-III) **under NEP-2020** if he/she has passed **B.Sc. Honours or B.Sc. Honours with research in a specific subject** under NEP-2020.

4) MEDIUM OF INSTRUCTION:

The medium of instruction for M.Sc. Degree course shall be English.

5) COURSES WITH PRACTICALS:

Each PG Science course includes practicals as per SPPU, UGC and NEP guideline

6) SCHEME OF CREDITS:

Two-year M. Sc. Degree has 88 credits or one-year M.Sc. degree has 44 credits. Each semester divided in to 22 credits as per NEP-2020 framework.

Semester wise credit distribution for speciation of M Sc degree as follows

A) For M.Sc. Analytical Chemistry, Organic Chemistry, and Microbiology

Table 1: Semester wise credit distribution for two-year PG programme after three-year B.Sc.

Sem	Mandatory	Elective	RM	FP/OJT	RP	Total
I	08 (T) + 06 (P)	04 (T)	04	--	--	22
II	08 (T) + 06 (P)	04 (T)	--	04	--	22
III	10 (T) + 04 (P)	04 (T)	--	--	04	22
IV	10 (T) + 02 (P)	04 (T)	--	--	06	22
Total	36 (T) + 18 (P)	16 (T)	04	04	10	88

T = Theory
P = Practical
RM= Research Methodology,
FP = Field Project,
OJT = On Job Training
RP= Research Project

Table 2: Semester wise credit distribution for one year PG programme after four-year B.Sc.

Sem	Mandatory	Elective	RM	FP/OJT	RP	Total
III	10 (T) + 04 (P)	04 (T)	--	--	04	22
IV	10 (T) + 02 (P)	04 (T)	--	--	06	22
Total	20 (T) + 06 (P)	08 (T)	--	--	10	44

B) For M.Sc. Mathematics

Table 1b): Semester wise credit distribution for two-year PG M.Sc. Mathematics programme after three-year B.Sc.

Sem	Mandatory	Elective	RM	FP/OJT	RP	Total
I	14 (T)	04 (T)	04	--	--	22
II	14 (T)	04 (T)	04	04	--	22
III	12 (T) + 2(P)	04 (T)	--	--	04	22
IV	10 (T) + 2(P)	04 (T)	--	--	06	22
Total	50 (T) + 04 (P)	16 (T)	04	04	10	88

Table 2b) Semester wise credit distribution for one year M.Sc. mathematics after four-year B.Sc.

Sem	Mandatory	Elective	RM	FP/OJT	RP	Total
III	12 (T) + 02(P)	04 (T)	--	--	04	22
IV	10 (T) + 02(P)	04 (T)	--	--	06	22
Total	22 (T) + 04(P)	08 (T)	--	--	10	44

C) For M.Sc. Computer Science:

Table 1c) Semester wise credit distribution for two-year PG M.Sc. Computer Science programme after three-year B.Sc.

Sem	Mandatory	Elective	RM	FP/OJT	RP	Total
I	10 (T) + 04(P)	02 (T) + 02 (P)	04	--	--	22
II	10 (T) + 04(P)	02 (T) + 02 (P)	--	04	--	22
III	10 (T) + 04(P)	04 (P)	--	--	04	22
IV	08 (T) + 04(P)	04 (P)	--	--	06	22
Total	38 (T) + 16 (P)	04 (T) + 12 (O)	04	04	10	88

Table 2c) Semester wise credit distribution for one year M.Sc. Computer Science after four-year B.Sc.

Sem	Mandatory	Elective	RM	FP/OJT	RP	Total
III	10 (T) + 04(P)	04 (P)	--	--	04	22
IV	08 (T) + 04(P)	04 (P)	--	--	06	22
Total	18 (T) + 08(P)	08 (T)	--	--	10	44

For each theory of one credit is equivalent to 15 clock hours of teaching and each one credit practical is equivalent to 30 clock hours of teaching in a semester.

7) SCHEME OF NO. OF COURSES AS PER CREDIT:

Table 3: Semester-Wise Number of Courses for Two-year PG Science M.Sc Analytical, Organic chemistry and Microbiology Programme (NEP-2020 w.e.f 2023-24)

Sem	Mandatory courses	Elective	RM	FP/OJT	RP	Total
I	2 credit x 4 theory paper 2 credit x 3 practical paper	2 credit x 2 theory	04 credit x 1	--	--	22
II	2 credit x 4 theory paper 2 credit x 3 practical paper	2 credit x 2 theory	--	04 credit x 1	--	22
III	2 credit x 5 theory paper 2 credit x 2 practical paper	2 credit x 2 theory	--	--	04 credit x 1	22
IV	2 credit x 5 theory paper 2 credit x 1 practical paper	2 credit x 2 theory	--	--	06 credit x 1	22

Table 4: Semester-Wise Number of Courses for Two-year PG Science M.Sc Mathematics Programme (NEP-2020 w.e.f 2023-24)

Sem	Mandatory courses	Elective	RM	FP/OJT	RP	Total
I	4 credit x 3 theory paper 2 credit x 1 theory paper	4 credit x 1 theory	04 credit x 1	--	--	22
II	4 credit x 3 theory paper 2 credit x 1 theory paper	4 credit x 1 theory	--	04 credit x 1	--	22
III	4 credit x 2 theory paper 2 credit x 2 theory paper 2 credit x 1 practical paper	4 credit x 1 theory	--	--	04 credit x 1	22
IV	4 credit x 2 theory paper 2 credit x 1 theory paper 2 credit x 1 practical paper	4 credit x 1 theory	--	--	06 credit x 1	22

Table 5: Semester-Wise Number of Courses for Two-year PG Science M.Sc. Computer Science Programme (NEP-2020 w.e.f 2023-24)

Sem	Mandatory courses	Elective	RM	FP/OJT	RP	Total
I	4 credit x 2 theory paper 2 credit x 1 theory paper 4 credit x 1 practical paper	2 credit x 1 theory 2 credit x 1 practical	04 credit x 1	--	--	22
II	4 credit x 2 theory paper 2 credit x 1 theory paper 4 credit x 1 practical paper	2 credit x 1 theory 2 credit x 1 practical	--	04 credit x 1	--	22
III	4 credit x 2 theory paper 2 credit x 1 theory paper 4 credit x 1 practical paper	4 credit x 1 practical	--	--	04 credit x 1	22
IV	4 credit x 2 theory paper 4 credit x 1 practical paper	4 credit x 1 practical	--	--	06 credit x 1	22

9) DURATION:

The program shall be a **full-time** program and the duration of the Two-year PG M. Sc. program shall be for **02 years**. The student has to complete the program in 04 Years (n+2) from the year of admission into the program as per university norms One-year PG M.Sc. programme duration of one year and has to completed in 03 years (n+2) from year of admission. New admission will be needed in **case a candidate fails** to complete the program in given time duration period for getting the degree.

10) ATTENDANCE:

No candidate shall be allowed to appear for the end semester examinations (External Examination) unless he/she has not less than **75% of attendance** in each semester.

11) COLLEGE TERMS:

The dates for the **commencement and conclusion** of the first and the second terms shall be as defined by the **College Authorities**. Only duly admitted students can keep the terms. Workload calculation is as per UGC guideline, SPPU guideline and NEP-2020 guideline. The **present relevant ordinances** pertaining to grant of terms will be applicable.

12) METHODS OF EVALUATION AND PASSING CRITERIA

Evaluation of each credit paper will be in two parts, namely Continuous Internal Evaluation (CIE) and End Semester Examination.

The evaluation of students will be done on three parameters:

1. Continuous Internal Evaluation (CIE)
2. End Semester Theory Examination (Final)
3. End Semester Practical Examination (Final)

Passing separately in CIE Internal Assessment, Practical Examination and end Semester Examination is compulsory

13) STRUCTURE OF EXAMINATION (CIE AND END SEMESTER EXAMINATION) MARK SCHEME FOR PG SCIENCE PROGRAM:

Table 6: Structure of Examination Mark Scheme for PG Science Programme (under NEP-2020 for 2023 Pattern)

Credit	Type of course (Mandatory / Elective)	Theory / Practical	Maximum CIE (Internal) Marks	Maximum End Semester (External) Marks	Total Marks
02	Mandatory / Elective	Theory / Practical	25	25	50
04	Mandatory / Elective	Theory / Practical	50	50	100
04	Mandatory	RM theory	50	50	100
04	Mandatory	FP/OJT	50	50	100
06	Mandatory	Research Project	75	75	150

14) CONTINUOUS INTERNAL EVALUATION (CIE)

For Continuous Internal Evaluation (CIE), evaluation of theory courses will be done continuously throughout the semester. CIE will be of 50% marks for CGPA papers.

Table 7: CIE for 4 credits theory paper

It will be divided as follows:

Sr. No.		COMPONENTS	MARKS
1.	CIE I	Mid Semester examination	15
2.	CIE II	Two Class Test of 15 marks each (Best of 2)	15
3.	CIE III	One Presentation/Seminar/ MCQ Test / Attendance	10
4.	CIE IV	Class Assignments / One group discussion /Open Book Test	10
		TOTAL	50

Table 8: CIE for 4 credits Practical paper

It will be divided as follows:

Sr. No.		COMPONENTS	MARKS
1.	CIE I	Mock Practical Examination	30
2.	CIE II	Viva Voce	10
3.	CIE III	Journal / project report/ dissertation report completion and certification on time / Attendance	10
		TOTAL	50

Above components will also be followed for 2 credit theory and practical papers by reducing total marks to 25.

15) DURATION OF END SEMESTER EXAMINATION (External):

Theory Question papers for **4 Credits** courses will be set for **Fifty Marks** (Three Hours Duration) and for **2 Credit Courses** for **Twenty-Five Marks** (One and Half Hours). **Practical** Question papers for 4 Credits courses will be set for Fifty Marks and for 2 Credit Courses for Twenty-Five Marks.

Table 9: Criteria for Paper Setting of Internal Assessment and End Semester Examination

Knowledge	Understanding	Applications, Analysis, Problem Solving	Total
50%	25%	25%	100%

16) STANDARD OF PASSING:

- Passing separately in Internal Assessment, Practical Examination and end Semester Examination is compulsory.
- A student must obtain a **minimum of 40% marks** in Continuous Internal Evaluation (CIE), and minimum 40% marks in Practical Examination and End Semester Examination (External Examination).
- Students who **fail or are absent in Continuous Internal Evaluation (CIE)** of any semester can **reappear** for the same in the **next semester**.

17) A.T.K.T. RULES:

- In two-year, PG degree: - If a Student fails in all the courses of semester I he/she shall be allowed to proceed with Semester II. Minimum number of credits required to take admission to second year: 22 [50% of total credits in First Year]

In one-year PG degree: - If a Student fails in all the courses of semester III, he/she shall be allowed to proceed with Semester IV.

18) COMPLETION OF DEGREE:

The students who earn 88 Credits, shall be considered to have completed the requirements of M.Sc. Program with Specialization in a particular subject and CGPA shall be calculated for such successful students. The conversion of marks to grade and grade point is given in table 9 and an example of CGPA calculation is given in table 10.

Table 10: Conversion of Marks into corresponding grade and GP

Sr. No.	Grade Letter	Grade Point	Marks
1.	O (Outstanding)	10	$90 \leq \text{Marks} \leq 100$
2.	A+ (Excellent)	9	$75 \leq \text{Marks} \leq 89$
3.	A (Very Good)	8	$60 \leq \text{Marks} \leq 74$
4.	B+ (Good)	7	$55 \leq \text{Marks} \leq 59$
5.	B (Above Average)	6	$50 \leq \text{Marks} \leq 54$
6.	C (Average)	5	$45 \leq \text{Marks} \leq 49$
7.	D (Pass)	4	$40 \leq \text{Marks} \leq 44$
8.	F (Fail)	0 to 3	$40 \leq \text{Marks}$
9.	Ab (Absent)	-	

19) PERFORMANCE INDICES:

Semester Grade point Average (SGPA): The performance of every student in each semester will be indicated by a number up-to two decimal places. This number will be called as **Semester Grade Point Average (SGPA)**. The **End Semester Marksheet** will

be declared at the end of each semester and it will contain grades for all the courses of that semester along with course codes, titles and SGPA.

The SGPA will be calculated as follows:

$$SGPA = \frac{\sum_{i=1}^p CiGi}{\sum_{i=1}^p Ci}$$

$$SGPA = \frac{\sum \text{Grade Points Earned} \times \text{Credits for Each Course}}{\text{Total Credits}}$$

The Final grade sheet and transcript will contain SGPA as well as **Cumulative Grade Point Average (CGPA)**. CGPA is the weighted average of all the courses (Theory/Practical/Project) of the first to fourth semester.

20) RESULT AND PERCENTAGE CALCULATION OF A GIVEN CGPA:

For the calculation of Percentage from CGPA following equation can be used:

$$\% \text{ of Marks} = \left\{ \begin{array}{l} \text{if } o \text{ grade then } 20 \times CGPA - 100 \\ \text{if } A + \text{ grade then } 12 \times CGPA - 25 \\ \text{if } A \text{ grade then } 10 \times CGPA - 7.5 \\ \text{if } B + \text{ grade then } 5 \times CGPA + 26.25 \\ \text{if } B \text{ grade then } 10 \times CGPA - 2.5 \\ \text{if } C \text{ grade then } 10 \times CGPA - 2.50 \\ \text{if } D \text{ grade then } 6.6 \times CGPA + 13.6 \end{array} \right\}$$

The factors considered in the above equations are evaluated from the grade point and marks distribution given in Table 9. The examples of the calculation of percentage are given in the Table 10.

Table 11: Conversion of CGPA into corresponding percentage

Obtained CGPA	Equation	Percentage (%)	Grade
10	$20 \times 10 - 100 = 100$	100	O
9.75	$20 \times 9.75 - 100 = 95$	95	O
9.5	$20 \times 9.5 - 100 = 90$	90	O
9.0	$12 \times 9.0 - 25 = 83$	83	A+
8.25	$12 \times 8.25 - 25 = 74$	74	A+
8.0	$10 \times 8.0 - 7.5 = 72.5$	72.5	A
7.0	$10 \times 7.0 - 7.5 = 62.5$	62.5	A
6.75	$10 \times 6.75 - 7.5 = 60.0$	60.0	A
6.25	$5 \times 6.25 + 26.25 = 57.5$	57.5	B+
5.75	$5 \times 5.75 + 26.25 = 55$	55	B+
5.5	$5 \times 5.5 - 2.5 = 52.5$	52.5	B
5.25	$10 \times 5.25 - 2.5 = 50$	50	B
4.75	$10 \times 4.75 - 2.50 = 45$	45	C
4.0	$6.6 \times 4.0 + 13.6 = 40$	40	D

21) ORDINANCE:

While declaring the result, the existing relevant ordinances (as in examination handbook) are applicable.

22) VERIFICATION AND REVALUATION:

The candidate may apply for verification and revaluation of end semester theory papers (External papers) through the College examination department which will be completed by the College as per the ordinance.

The revaluation of the answer book/s, however, shall not be permitted in respect of scripts of Practical Examination / Term work / Internal Assessment/ Sessional Marks / Dissertation / Thesis / Clinical / MCQ (Multiple Choice Question in practical examination) and Viva-Voce etc.

23) STRUCTURE OF TRANSCRIPT:

Conversion of CGPA into Letter grade(s):

The following illustration could be taken as an example for computing Letter Grade from CGPA.

Table 12: CGPA distribution and corresponding class of the degree awarded

Sr. No.	CGPA /Numerical Grade	Class of the degree awarded / Letter Grade
1.	9.50 or more than 9.50	Outstanding (O)
2.	8.25 or more but less than 9.50	Excellent (A+)
3.	6.75 or more but less than 8.25	Very Good (A)
4.	5.75 or more but less than 6.75	Good (B+)
5.	5.25 or more but less than 5.75	Above Average (B)
6.	4.75 or more but less than 5.25	Average (C)
7.	4.00 or more but less than 4.75	Pass (D)

24) GRADE IMPROVEMENT

- A Candidate will be allowed to re-appear for the examination for improvement of Class or grade within a period of 2 years from the date of his/her passing Master degree examination. Only 1 attempt for improvement will be allowed, according to the syllabus in existence.
- A Candidate shall have to reappear for minimum 1/3rd and /or maximum all the courses at a time on which the class is awarded.
- A Candidate who has appeared for improvement of class and fails to improve his/her class, his/her performance at such reappearance shall be ignored.
- A Candidate appearing for the improvement of Class grade shall not be entitled to be in the list of Rank holders/ Merit.
- Improved Candidate will have to surrender the degree, Statement of marks, passing certificate in original, after the declaration of their results of the concerned improved class. After surrendering the above documents in original, new certificate will be issued in due course of time as in usual process.

25) TERMS OF COURSE:

- a. The existing relevant ordinance will be applicable i.e. N+2
- b. The maximum duration to complete the two-year Masters of Science Program will be (N+2) i.e (2+2) years to complete the M.Sc. Program.
- c. The maximum duration to complete the one-year Masters of Science Program will be (N+2) i.e (1+2) years to complete the M.Sc. Program.
- c. The student will have to take fresh admission if the student fails to complete the M.Sc. degree in n+2 years.
- d. other terms of course applicable as per UGC, SPPU and NEP-2020 guideline.

26) End Semester Examination Question paper format for 50 marks and 25 marks

M.Sc. Chemistry Paper setting pattern

2 credit papers

Q No	Type of Question	Marks
Q1.	Attempt any Four (2 Marks each)	8
Q2.	Attempt any two (4 Marks each)	8
Q3.	Attempt any three (3 Marks each)	9
Total Marks		25

or

Q. No.	Type of Questions	Marks
1.	Attempt any Five (2 Marks each)	10
2.	Attempt Any Two (5 Marks each)	10
3.	Attempt Any Two (2 ½ Marks each)	05
Total 3 questions		
Total Marks		25

4 credit and Research Methodology paper

Q. No.	Type of Question	Marks
Q1.	Attempt any Five (2 Marks each)	10
Q2.	Attempt any two (5 Marks each)	10
Q3.	Attempt any two (5 Marks each)	10
Q4.	Attempt any two (5 Marks each)	10
Q5.	Attempt any one (10 Marks each)	10
Total Marks		50

M.Sc. Microbiology and Computer Science Paper setting pattern

2 credit papers

Q. No.	Type of Questions	Marks
1.	Attempt any Five (2 Marks each)	10
2.	Attempt Any Two (5 Marks each)	10
3.	Attempt Any One (5 Marks each)	05
Total 3 questions		
Total Marks		25

4 credit papers

Q. No.	Type of Question	Marks
Q1.	Attempt any Five (2 Marks each)	10
Q2.	Attempt any two (5 Marks each)	10
Q3.	Attempt any two (5 Marks each)	10
Q4.	Attempt any two (5 Marks each)	10
Q5.	Attempt any two (5 Marks each)	10
Total 5 questions		
Total Marks		50

M.Sc. Mathematics Paper setting pattern

Q No.	Type of Question	Marks
Note: 1. Attempt any Five questions. 2. Attempt all sub questions of a selected questions.		
Q1.	a) 5 marks b) 3 marks c) 2 Marks Or a) 4 marks b) 4 marks c) 2 marks	10
Q2.	a) 5 marks b) 3 marks c) 2 Marks Or a) 4 marks b) 4 marks c) 2 marks	10
Q3.	a) 5 marks b) 3 marks c) 2 Marks Or a) 4 marks b) 4 marks c) 2 marks	10
Q4.	a) 5 marks b) 3 marks c) 2 Marks Or a) 4 marks b) 4 marks c) 2 marks	10
Q5.	a) 5 marks b) 3 marks c) 2 Marks Or a) 4 marks b) 4 marks c) 2 marks	10

Q6.	a) 5 marks b) 3 marks c) 2 Marks Or a) 4 marks b) 4 marks c) 2 marks	10
Q7.	a) 5 marks b) 5 marks	10
Q8.	a) 5 marks b) 5 marks	10
Total 5 questions		
Total Marks		50

Q No.	Type of Question	Marks
Note: 1. Attempt any Five questions. 2. Attempt all sub questions of a selected questions.		
Q1.	a) 3 marks b) 2 marks	5
Q2.	a) 3 marks b) 2 marks	5
Q3.	a) 3 marks b) 2 marks	5
Q4.	a) 3 marks b) 2 marks	5
Q5.	a) 3 marks b) 2 marks	5
Q6.	a) 3 marks b) 2 marks	5
Q7.	a) 5 marks	5
Q8.	a) 5 marks	5
Total 5 questions		
Total Marks		25