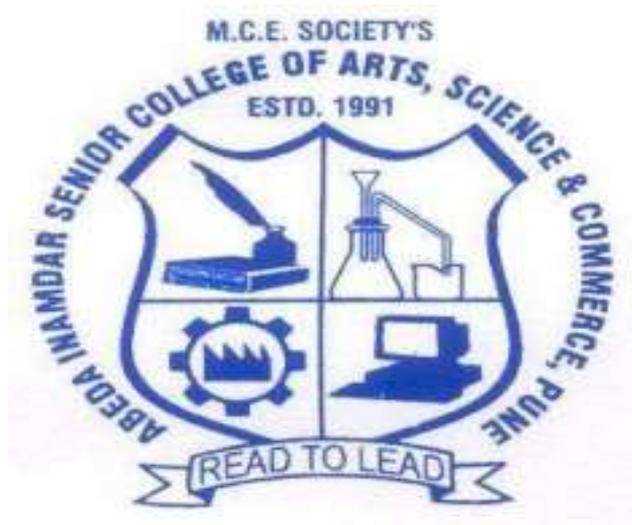


M. Sc. PROGRAM STRUCTURE

FACULTY OF SCIENCE

For Choice-Based Credit System (CBCS) Under
Autonomy (Semester Pattern)
Masters of Science (M.Sc.) Program (2021 Pattern)



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

With effect from 2021-2022

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

For the Award of
Masters of Science (M.Sc.)

Applicable for the Autonomous College affiliated to
Savitribai Phule Pune University

M.Sc. Degree Course (Choice Based Credit System - 2021 Pattern)

With effect from 2021-2022

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1) INTRODUCTION:

The M.Sc. Degree Course (2021 pattern) will be introduced in the following order:

a. First Year M.Sc. 2021-2022

b. Second Year M.Sc. 2022-2023

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

The specializations of M.Sc. Degree are:

1. Microbiology
2. Mathematics
3. Organic Chemistry
4. Analytical Chemistry
5. Computer Science

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

2) ELIGIBILITY:

- a) Candidate shall be admitted to the First Year of the M.Sc. Degree Course (**2021 pattern**) 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) For admission to **M. Sc. (Mathematics)** -Bachelor of Science with Mathematics or/Mathematics at least upto second year B.E./B.Tech. /B.Sc
- c) 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.

3) COURSES WITH PRACTICALS:

Each PG Science course includes practicals.

4) MEDIUM OF INSTRUCTION:

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

5) SCHEME OF CREDITS (CGPA/Academic):

For each theory one credit is equivalent to 15 clock hours of teaching and each practical one credit is equivalent to 30 clock hours of teaching in a semester. Each 4 credit theory papers and 2 Credit Practical sessions are of 4 hours duration per week.

Table 1: Total CGPA Credits for PG Science Programme (2021 Pattern)

Sr. No.	Semester No.	No. of 4 credit Courses		No. of 2 credit Courses		Total CGPA Credits
		T	P	T	P	
M.Sc.(Microbiology)						
1.	I	3	1	1	1	20
2.	II	3	1	1	1	20
3.	III	3	1	1	1	20
4.	IV	2	1	2	2	20
M.Sc.(Organic Chemistry and Analytical Chemistry)						
1.	I	3	--	1	3	20
2.	II	3	--	1	3	20
3.	III	3	--	1	3	20
4.	IV	3	--	1	3	20
M.Sc. (Mathematics)						
1.	I	5	--	--	--	20
2.	II	5	--	--	--	20
3.	III	4	--	1	1	20
4.	IV	4	--	1	1	20
M.Sc.(Computer Science)						
1.	I	3	1	1	1	20
2.	II	3	1	1	1	20
3.	III	3	1	1	1	20
4.	IV	--	1*	--	--	20

Note: * indicates one industrial training / institutional project for 20 Credits.

6) COURSE WISE CLASSIFICATION OF CGPA and Non-CGPA ACADEMIC CREDITS:

Table 2: Total credits for PG Science Programme (2021 Pattern)

Sr. No.	Nature of Courses	Credits / Semesters				Total (Credits)
		I	II	III	IV	
M.Sc. (Microbiology)						
1.	Discipline Specific Core Course Theory	12	12	12	08	44
2.	Discipline Specific Core Course Practical	4	4	4	4	16
3.	Discipline Specific Choice Based optional Theory	2	2	2	4	10
4.	Discipline Specific Choice Based optional Practical	2	2	2	4	10
5.	Ability Enhancement Course	3	3	-	-	06
6.	Skill Enhancement Course	-	-	3	3	06
Sub Total		23	23	23	23	92
M.Sc.(Organic Chemistry and Analytical Chemistry)						
1.	Discipline Specific Core Course Theory	12	12	12	12	48
2.	Discipline Specific Core Course Practical	6	6	6	4	22
3.	Discipline Specific Choice Based optional Theory	2	2	2	2	08
4.	Discipline Specific Choice Based optional Practical	--	--	--	2	02
5.	Ability Enhancement Course	3	3	-	-	06
6.	Skill Enhancement Course	-	-	3	3	06
Sub Total		23	23	23	23	92
M.Sc. (Mathematics)						
1.	Discipline Specific Core Course Theory	20	20	10	10	60
2.	Discipline Specific Core Course Practical	--	--	2	2	04
3.	Discipline Specific Choice Based Optional Theory	--	--	8	8	16
4.	Ability Enhancement Course	3	3	-	-	06
5.	Skill Enhancement Course	-	-	3	3	06
Sub Total		23	23	23	23	92

M.Sc.(Computer Science)						
Sr. No.	Nature of Courses	Credits / Semesters				Total (Credits)
		I	II	III	IV	
1.	Discipline Specific Core Course Theory	12	12	12	--	36
2.	Discipline Specific Core Course Practical	4	4	4	20	32
3.	Discipline Specific Choice Based optional Theory	2	2	2	---	06
4.	Discipline Specific Choice Based optional Practical	2	2	2	---	06
5.	Ability Enhancement Course	3	3	-	-	06
6.	Skill Enhancement Course	-	-	3	3	06
Sub Total		23	23	23	23	92

7) SCHEME OF CREDITS (NON-CGPA):

In addition to the **compulsory credits of 80**, the student has to earn **additional 12 credits**. These extra credits will **not be considered for CGPA calculation**; however, these are mandatory for the completion and award of M.Sc. Degree.

Table 3: Description of Mandatory Non-CGPA Credits

Sr. No.	Nature of Courses	Semesters (Credits)				Total (Credits)
		I	II	III	IV	
Ability Enhancement Courses						
1.	Human Rights	3	--	--	--	03
2.	Cyber Security	--	3	--	--	03
Skill Enhancement Courses						
1.	Human Values & Professional Ethics	--	--	3	--	03
2.	Skill Development	--	--	--	3	03
Sub Total		3	3	3	3	12

8) SCHEME OF NO. OF COURSES:

Table 4: Semester-Wise Number of CGPA and Non-CGPA Courses for PG Science Programme (2021 Pattern)

Sr. No.	Nature of Courses	Semesters (Subjects)				Total (Subjects)
		I	II	III	IV	
M.Sc. (Microbiology)						
1.	Discipline Specific Core Course Theory	3	3	3	2	11
2.	Discipline Specific Core Course Practical	1	1	1	1	4
3.	Discipline Specific Choice Based Optional Theory Paper	1	1	1	2	5
4.	Discipline Specific Choice Based Optional Practical Paper	1	1	1	2	5
5.	Ability Enhancement Course	1	1	-	-	2
6.	Skill Enhancement Course	--	--	1	1	2
Sub Total		7	7	7	8	29
M.Sc. (Organic Chemistry and Analytical Chemistry)						
1.	Discipline Specific Core Course Theory	3	3	3	3	12
2.	Discipline Specific Core Course Practical	3	3	3	2	11
3.	Discipline Specific Choice Based Optional Theory Paper	1	1	1	1	4
4.	Discipline Specific Choice Based Optional Practical Paper	--	--	--	1	1
5.	Ability Enhancement Course	1	1	-	-	2
6.	Skill Enhancement Course	--	--	1	1	2
Sub Total		8	8	8	8	32

Sr. No.	Nature of Courses	Semesters (Subjects)				Total (Subjects)
		I	II	III	IV	
M.Sc.(Mathematics)						
1.	Discipline Specific Core Course Theory	5	5	3	3	16
2.	Discipline Specific Core Course Practical	--	--	1	1	2
3.	Discipline Specific Choice Based Optional Theory Paper			2	2	4
4.	Ability Enhancement Course	1	1	-	-	2
5.	Skill Enhancement Course	-	-	1	1	2
Sub Total		6	6	7	7	26
M.Sc. (Computer Science)						
1.	Discipline Specific Core Course Theory	3	3	3	--	9
2.	Discipline Specific Core Course Practical	1	1	1	1	4
3.	Discipline Specific Choice Based Optional Theory Paper	1	1	1	--	3
4.	Discipline Specific Choice Based Optional Practical Paper	1	1	1	---	3
5.	Ability Enhancement Course	1	1	-	-	2
6.	Skill Enhancement Course	--	--	1	1	2
Sub Total		7	7	7	2	23

9) DURATION:

The program shall be a full-time program and the duration of the program shall be for 2 years. The student has to complete the program in **4 Years from the year of admission** into the program as per university norms. New admission will be needed in First year M.Sc.in **case a candidate fails** to complete the program in 4 years 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. The **present relevant ordinances** pertaining to grant of terms will be applicable.

12) METHODS OF EVALUATION AND PASSING CRITERIA

Evaluation of each CGPA 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

STRUCTURE OF EXAMINATION (CIE AND END SEMESTER EXAMINATION)

MARK SCHEME OF CBCS FOR PG SCIENCE PROGRAM:

Table 5: Structure of Examination Mark Scheme of CBCS for PG Science Programme (2021 Pattern)

Core Compulsory Theory Paper (CCTP)
Choice Based Optional Paper (CBOP)
Core Compulsory Practical Paper (CCPP)

Semester	Course Name	Subject Name	Credit	Maximum CIE (Internal) Marks	Maximum End Semester (External) Marks	Total Marks
M.Sc. (Microbiology)						
I	CCTP - 1		4	50	50	100
	CCTP - 2		4	50	50	100
	CCTP - 3		4	50	50	100
	CBOP - 1(Theory)		2	25	25	50
	CBOP - 1 (Practical)		2	25	25	50
	CCPP - 1		4	50	50	100
II	CCTP - 4		4	50	50	100
	CCTP - 5		4	50	50	100
	CCTP - 6		4	50	50	100
	CBOP - 2(Theory)		2	25	25	50
	CBOP - 2 (Practical)		2	25	25	50
	CCPP - 2		4	50	50	100
III	CCTP - 7		4	50	50	100
	CCTP - 8		4	50	50	100
	CCTP - 9		4	50	50	100
	CBOP - 3 (Theory)		2	25	25	50
	CBOP - 3 (Practical)		2	25	25	50
	CCPP - 3		4	50	50	100
IV	CCTP - 10		4	50	50	100
	CCTP - 11		4	50	50	100
	CBOP - 4 (Theory)		2	25	25	50
	CBOP - 4 (Practical)		2	25	25	50
	CBOP - 5 (Theory)		2	25	25	50
	CBOP - 5 (Practical)		2	25	25	50
	CCPP-4		4	50	50	100

M.Sc. (Organic Chemistry and Analytical Chemistry)						
I	CCTP - 1		4	50	50	100
	CCTP - 2		4	50	50	100
	CCTP - 3		4	50	50	100
	CBOP - 1(Theory)		2	25	25	50
	CCPP - 1		2	25	25	50
	CCPP-2		2	25	25	50
	CCPP - 3		2	25	25	50
II	CCTP - 4		4	50	50	100
	CCTP - 5		4	50	50	100
	CCTP - 6		4	50	50	100
	CBOP - 2(Theory)		2	25	25	50
	CCPP -4		2	25	25	50
	CCPP-5		2	25	25	50
	CCPP -6		2	25	25	50
III	CCTP - 7		4	50	50	100
	CCTP - 8		4	50	50	100
	CCTP - 9		4	50	50	100
	CBOP - 3 (Theory)		2	25	25	50
	CCPP -7		2	25	25	50
	CCPP-8		2	25	25	50
	CCPP - 9		2	25	25	50
IV	CCTP - 10		4	50	50	100
	CCTP-11		4	50	50	100
	CCTP-12		4	50	50	100
	CBOP-4 (Theory)		2	25	25	50
	CCPP-10		2	25	25	50
	CCPP-11		2	25	25	50
	CBOP-1 (Practical/project)		2	25	25	50

M.Sc.(Mathematics)						
Semester	Course Name	Subject Name	Credit	Maximum CIE (Internal) Marks	Maximum End Semester (External) Marks	Total Marks
I	CCTP - 1		4	50	50	100
	CCTP - 2		4	50	50	100
	CCTP - 3		4	50	50	100
	CCTP - 4		4	50	50	100
	CCTP - 5		4	50	50	100
II	CCTP – 6		4	50	50	100
	CCTP – 7		4	50	50	100
	CCTP – 8		4	50	50	100
	CCTP – 9		2	50	50	100
	CCTP – 10		2	50	50	100
III	CCTP – 11		4	50	50	100
	CCTP – 12		4	50	50	100
	CCTP – 13		2	25	25	50
	CCPP – 1		2	25	25	50
	CBOP – 1		4	50	50	100
	CBOP - 2		4	50	50	100
IV	CCTP - 14		4	50	50	100
	CCTP - 15		4	50	50	100
	CCTP - 16		2	25	25	50
	CCPP - 2		2	25	25	50
	CBOP – 3		4	50	50	100
	CBOP – 4		4	50	50	100

M.Sc. (Computer Science)						
Semester	Course Name	Subject Name	Credit	Maximum CIE (Internal) Marks	Maximum End Semester (External) Marks	Total Marks
I	CCTP - 1		4	50	50	100
	CCTP - 2		4	50	50	100
	CCTP - 3		4	50	50	100
	CBOP - 1(Theory)		2	25	25	50
	CBOP - 1 (Practical)		2	25	25	50
	CCPP - 1		4	50	50	100
II	CCTP - 4		4	50	50	100
	CCTP - 5		4	50	50	100
	CCTP - 6		4	50	50	100
	CBOP - 2(Theory)		2	25	25	50
	CBOP - 2 (Practical)		2	25	25	50
	CCPP - 2		4	50	50	100
III	CCTP - 7		4	50	50	100
	CCTP - 8		4	50	50	100
	CCTP - 9		4	50	50	100
	CBOP - 3 (Theory)		2	25	25	50
	CBOP - 3 (Practical)		2	25	25	50
	CCPP - 3		4	50	50	100
IV	CCPP - 4		20	250	250	500

Core Compulsory Theory Paper (CCTP)
Choice Based Optional Paper (CBOP)
Core Compulsory Practical Paper (CCPP)

13) 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 6: 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	10
4.	CIE IV	Class Assignments / One group discussion/Open Book Test	10
		TOTAL	50

Table 7: 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.	05
4.	CIE IV	Attendance	05
		TOTAL	50

Above components will also be followed for 2 credit theory and practical papers.

14) 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 8: Criteria for Paper Setting of Internal Assessment and End Semester Examination

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

15) 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**.

16) A.T.K.T. RULES:

- If a Student fails in all the courses of semester I he/she shall be allowed to proceed with Semester II. Minimum number of **CGPA credits** required to take admission to second year: 20 [50% of total credits in First Year]

17) COMPLETION OF DEGREE:

The students who earn 92 Credits (80 CGPA and 12 Non-CGPA), 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 9: 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)	-	

**Structure of CGPA and Mark Scheme of CBCS for PG Science
Programme (An Example)**

Table 10: Method of Calculation of Credit Points

Semester	Course Name	Subject Name	Credit	Maximum Internal Marks	Maximum External Marks	Grade Letter (F-O)	Grade Point (0-10)	Credit Point = (Credit x Grade Point)
I	CCTP - 1		4	50	50	A	8	32
	CCTP - 2		4	50	50	O	10	40
	CCTP - 3		4	50	50	A+	9	36
	CBOP - 1(Theory)		2	50	50	B+	7	14
	CBOP - 1 (Practical)		2	25	25	A+	9	18
	CCPP - 1		4	25	25	O	10	40
			20	250	250			180
				SGPA	Total Credit Point / Total Credit for the semester			9.00

II	CCTP – 4		4	50	50	O	10	40
	CCTP – 5		4	50	50	O	10	40
	CCTP – 6		4	50	50	A+	9	36
	CBOP – 2 (Theory)		2	50	50	A	8	16
	CBOP – 2 (Practical)		2	25	25	A+	9	18
	CCPP - 2		4	25	25	O	10	40
			20	250	250			190
				SGPA	Total Credit Point / Total Credit for the semester			9.50
III	CCTP – 7		4	50	50	A	8	32
	CCTP – 8		4	50	50	O	10	40
	CCTP – 9		4	50	50	A+	9	36
	CBOP – 3 (Theory)		2	50	50	B+	7	14
	CBOP – 3 (Practical)		2	25	25	A+	9	18
	CCPP - 3		4	25	25	O	10	40
			20	250	250			180
				SGPA	Total Credit Point / Total Credit for the semester			9.00
IV	CCTP - 10		4	50	50	C	5	20
	CCTP - 11		4	50	50	D	4	16
	CBOP-4 (Theory)		2	25	25	A+	9	18
	CBOP-4 (Practical)		2	25	25	B+	7	14
	CBOP-5 (Theory)		2	25	25	A+	9	18

	CBOP-5 (Practical)		2	25	25	O	10	20
	CCPP -4		4	50	50	O	10	40
			20	250	250			146
				SGPA	Total Credit Point / Total Credit for the semester			7.30
				CGPA	Total Credit Point / Total Credit for the course			8.70
				Final Grade				A+ (Excellent)
				% of Marks				79.4%

18) 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.

19) RESULT AND PERCENTAGE CALCULATION OF A GIVEN

CGPA For the calculation of Percentage from CGPA following equation can

be

used:

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

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	$5 \times 5.5 - 2.5 = 55.5$	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

20) ORDINANCE:

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

21) VERIFICATION AND REVALUATION:

The candidate may apply for verification and revaluation of end semester theory papers (External papers) **through Principal** of the College 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.

22) 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)

23) 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.

24) TERMS OF COURSE

- a. The existing relevant ordinance will be applicable i.e. N+2
- b. The maximum duration to complete the Masters of Science Program will be (N+2) i.e (2+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 4 years.

Question paper format for 50 marks and 25 marks

M.Sc. Microbiology Paper setting pattern

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

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

M.Sc. Chemistry Paper setting pattern

Q. No.	Type of Question	Marks
Section-I		
Q1.	Attempt any Four (2 Marks each)	8
Q2.	Attempt any two (4 Marks each)	8
Q3.	Attempt any three (3 Marks each)	9
Section-II		
Q4.	Attempt any Four (2 Marks each)	8
Q5.	Attempt any two (4 Marks each)	8
Q6.	Attempt any three (3 Marks each)	9
Total 6 questions		
Total Marks		50

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 3 questions		
Total Marks		25

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

M.Sc. Computer Science Paper setting pattern

Q. No.	Type of Questions	Marks
1.	Attempt all (2 Marks each)	10
2.	Attempt Any Two (5 Marks each)	10
3.	Attempt Any Two (5 Marks each)	10
4.	Attempt Any Two (4 Marks each)	8
5.	Attempt Any Two (6 Marks each)	12
Total 5 questions		
Total Marks		50

Q. No.	Type of Questions	Marks
1.	Attempt all (1 Marks each)	5
2.	Attempt All (5 Marks each)	10
3.	Attempt Any Two (5 Marks each)	10
Total 3 questions		
Total Marks		25

Non CGPA Ability and Skill Enhancement Courses

Sr. No.	Semester	Subject Code	Department	Name of Course
1.	I	21PGHUR11M	All PG Science	Human Rights
2.	II	21PGCYS12M	All PG Science	Cyber Security
3.	III	21PGHPE23M	All PG Science	Human Values and Professional Ethics
4.	IV	21DSDCT24M	Chemistry and Microbiology	Chromatographic Techniques
5.	IV	21DSDLT24M	Mathematics	Introduction to LaTeX
6.	IV	21DSDLP24M	Computer Science	LISP and Prolog (Programming Language)