

**DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY,
CHHATRAPATI SAMBHAJINAGAR.**



CIRCULAR NO.SU/ M.Sc./Model Question Paper/NEP/57/2023

It is hereby inform to all concerned that, on the recommendation of the Dean, Faculty of Science & Technology the **Academic Council at its meeting held on 30 November 2023 has accepted the Structure and Model of Question Paper (Theory and Practical) of M.Sc. First Year (Ist and IIInd semester) for Two Years Post Graduate Degree Programme as per Norms of National Education Policy – 2020** under the Faculty of Science & Technology as appended herewith:-

This shall be effective from the Academic Year 2023-24 and onwards.

All concerned are requested to note the contents of this circular and bring notice to the students, teachers and staff for their information and necessary action.

University Campus,
Chhatrapati Sambhajinagar
431 004.

REF.NO.SU/2023/20565-73

Date:- 29.12.2023.

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**Deputy Registrar,
Academic (Syllabus) Section.**

Copy forwarded with compliments to :-

- 1] **The Principal of all concerned Colleges,**
Dr. Babasaheb Ambedkar Marathwada University,
- 2] **The Director, University Network & Information Centre, UNIC, with a request to upload this Circular on University Website.**

Copy to :-

- 1] **The Director, Board of Examinations & Evaluation, Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.**
- 2] The Section Officer,[M.Sc.Unit] Examination Branch, Dr.Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar
- 3] The Programmer [Computer Unit-1] Examinations, Dr.Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.
- 4] The Programmer [Computer Unit-2] Examinations, Dr.Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar
- 5] The In-charge,[E-Suvidha Kendra], Rajarshi Shahu Maharaj Pariksha Bhavan, Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.
- 6] The Public Relation Officer, Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.
- 7] The Record Keeper, Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.

**DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY, CHHATRAPTI
SAMBHAJI NAGAR**

Faculty of Science and Technology

Subject -

M.Sc. First Year (Semester I and II)

Model question paper pattern. 2023-2024

Theory Papers 1/ 2 credits (50 marks)

Paper Name:

Subject code No.:

Time 1.00 Hrs.

Max. Marks 30

(Semester End Exam)

Q1. Objective type question (5 questions) -	5 (1 marks x 5)
Q 2. Short notes (solve any three out of five)	9 (3 marks x 3)
Q 3. Long answer (solve any four out of five)	16 (4 marks x4)

Practical papers

**DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY, CHHATRAPTI
SAMBHAJI NAGAR**

Faculty of Science and Technology

Subject -

M.Sc. First Year (Semester I and II)

Model question paper pattern. 2023-2024

Practical paper - 1/ 2 credit (50 marks)

Paper No. :

Subject code No.:

Time 3Hrs

Max. Marks 30

Qu. No. 1	Experiment (major) OR Experiment (major)	10 marks
Qu. No. 2	Experiment (minor) OR Experiment (minor)	5 marks
Qu. No.3	Experiment (minor) OR Experiment (minor)	5 marks
Qu. No.4	Record book, field survey report/ slides/models etc.	5 marks
Qu. No.5	Viva-Voce	5 marks



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SAMBHAJI NAGAR**

Faculty of Science and Technology

Subject-

M.Sc. First Year (Semester I and II)

Model question paper pattern. 2023-2024

Theory Papers 4 credits (100 marks)

Paper Name. :

Time 2 Hrs.

Subject code No.:

Max.Marks:60

(Semester End Exam)

- | | |
|---|------------------|
| Q1. Objective type questions (five questions) ----- | 10 (2 marks x 5) |
| Q 2. Short notes (solve any four, out of five) | 20 (5mrks x 4) |
| Q 3 Long answer (solve any three, out of five) | 30 (10 marksx3) |

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SAMBHAJI NAGAR**

Faculty of Science and Technology

Subject -

M.Sc. First Year (Semester I and II)

Model question paper pattern. 2023-2024

Theory Papers 3 credits (75 marks)

Paper Name:

Time 1.30 Hrs.

Subject code No.:

Max. Marks **45**

(Semester End Exam)

- | | |
|---|-------------------|
| Q1. Objective type question (5 questions) ----- | 10 (2 marks x 5) |
| Q2. Short notes (solve any three, out of five) | 15 (5 marks x 3) |
| Q 3. Long answer (solve any two out of three) | 20 (10 marks x 2) |



DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY, AURANGABAD



FACULTY OF SCIENCE & TECHNOLOGY

2 Years P.G. Programme in Science

(M.Sc.)

As per National Education Policy-2020

(To be implemented from Academic Year -2023-24)

Course Structure and Curriculum

(Outcome Based Credit System)

Subject: -----

(Effective from 2023-24)

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7	Eligibility	
8	Duration	
9	Medium of Instruction	
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11	Evolution Methods /Scheme of examination	
12	Curriculum- Semester-I	
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1. Preamble -

2. Structure:-

Two-Year Post-graduate Program

Course and Credits Distribution of Two years/One Year PG/Master's Degree Program with Entry & Exit Option

Faculty of Science & Technology

Year / level	Sem.	Major subject		RM	OJT /FP	RP	Credits	Degree
		DSC Core Mandatory	DSE (Elective)					
First year 6.0	I	3(4) +2=14	4	4			22	PG Diploma (after 3 years degree)
	II	3(4) +2=14	4		4		22	
Cum. Cr. For PG Diploma		28	08	4	4		44	
Exit option with Post-graduate Diploma (44 credits) after first year or two semester with completion of courses equivalent to 44 credits								
Second Year 6.5	III	3(4)+2=14	4			4	22	PG Degree after 3 years UG or PG Degree after 4 years UG
	IV	3(4)=12	4			6	22	
Cum. Cr. For 1 year PG Degree		26	8			10	44	
Cum. Cr. For 2 years PG Degree		54	16	4	4	10	88	
2 Years -4 sem.PG Degree (88 credits) after three year UG Degree or 1 Year -2 sem. PG Degree (44 credits) after four year UG degree								

Note- Master Programme is based on specialization

ABBREVIATION:

Major – Comprising Mandatory –is based on specialization

DSE- Discipline Specific Elective

OJT – On-the- Job Training

FP – Field Project (Corresponding to the Major (Core) Subject

RP – Research Project (Corresponding to the Major (Core) Subject

Internship/Apprenticeship - (Corresponding to the Major (Core) Subject

AS PER NEP 2020

Illustrative Credit distribution structure for Two Years/One Year Programme with Multiple Entry and Exit options –

Class: M.Sc. First Year

Semester: Ist Semester

Subject: -----

Course type	Course Code	Course Name	Teaching Scheme (Hrs./ week)		Credits Assigned		Total Credits
			Theory	Practical	Theory	Practical	
Major Mandatory DSC	ZOO/MJ/500-T		2	-	2	-	14
	ZOO/MJ/501-T		2		2	-	
	ZOO/MJ/502-T		2	-	2	-	
	ZOO/MJ/503-T		2		2		
	ZOO/MJ/504-P		-	4	-	2	
	ZOO/MJ/505-P		-	4	-	2	
	ZOO/MJ/506-P		-	4	-	2	
DSE (Choose any one from pool of courses)	ZOO/DSE/507-T		2	-	2	-	04
	ZOO/DSE/508-P		-	4	-	2	
RM	ZOO/RM/508-T		4	-	4	-	04
			14	16	14	08	22 credits

1. Major Mandatory (DSC)

ZOO/MJ/500-T
ZOO/MJ/501-T
ZOO/MJ/502-T
ZOO/MJ/503-T
ZOO/MJ/504-P
ZOO/MJ/505-P
ZOO/MJ/506-P

2. Discipline Specific Elective Course : (Choose any one from basket)

ZOO/DSE/507-T

ZOO/DSE/508-P

Or

3. : Research Methodology (RM): ZOO/RM/508-T-

Class: M.Sc.**First Year****Semester: II Semester**

Course type	Course Code	Course Name	Teaching Scheme (Hrs./ week)		Credits Assigned		Total Credits
			Theory	Practical	Theory	Practical	
Major Mandatory DSC	ZOO/MJ/550-T		2	-	2	-	14
	ZOO/MJ/551-T		2		2	-	
	ZOO/MJ/552-T		2	-	2	-	
	ZOO/MJ/553-T		2		2		
	ZOO/MJ/554-P		-	4	-	2	
	ZOO/MJ/555-P		-	4	-	2	
	ZOO/MJ/556-P		-	4	-	2	
DSE (Choose any one from pool of courses)	ZOO/DSE/557-T		2	-	2	-	04
	ZOO/DSE/558-P		-	4	-	2	
OJT/FP	ZOO/OJT/FP/559-P			4		4	04
			10	20	10	12	22 credits

Note: Credits for internship shall be one credit per one week of internship/OJT, subject to a maximum of six credits in a semester

1. Major Mandatory (DSC)

ZOO/MJ/550-T
ZOO/MJ/551-T
ZOO/MJ/552-T
ZOO/MJ/553-T
ZOO/MJ/554-P
ZOO/MJ/555-P
ZOO/MJ/556-P

2. Discipline Specific Elective Course: (Choose any one from basket)

ZOO/DSE/557-T

ZOO/DSE/558-P

OR

ZOO/DSE/559-T

ZOO/DSE/560-P

OR

3. OJT/FP-1: ZOO/OJT/FP/559-P

Class: M.Sc.**Second Year****Semester: III Semester**

Course type	Course Code	Course Name	Teaching Scheme (Hrs./ week)		Credits Assigned		Total Credits
			Theory	Practical	Theory	Practical	
Major Mandatory DSC	ZOO/MJ/600-T		2	-	2	-	14
	ZOO/MJ/601-T		2		2	-	
	ZOO/MJ/602-T		2	-	2	-	
	ZOO/MJ/603-T		2		2		
	ZOO/MJ/604-P		-	4	-	2	
	ZOO/MJ/605-P		-	4	-	2	
	ZOO/MJ/606-P		-	4	-	2	
DSE (Choose any one from pool of courses)	ZOO/DSE/607-T		2	-	2	-	2+2= 04
	ZOO/DSE/608-P		-	4	-	2	
RP-1	ZOO/RP-1/609-P		-	8	-	4	04
			10	24	10	12	22 credits

1. Major Mandatory (DSC)

ZOO/MJ/600-T
ZOO/MJ/601-T
ZOO/MJ/602-T
ZOO/MJ/603-T
ZOO/MJ/604-P
ZOO/MJ/605-P
ZOO/MJ/606-P

2. Discipline Specific Elective Course : (Choose any one from basket)

ZOO/DSE/607-T

ZOO/DSE/608-P

Or

ZOO/DSE/609-T

ZOO/DSE/610-P

Or

3. RP-1: ZOO/RP-1/609-P

Course type	Course Code	Course Name	Teaching Scheme (Hrs./ week)		Credits Assigned		Total Credits
			Theory	Practical	Theory	Practical	
Major Mandatory DSC	ZOO/MJ/650-T		2	-	2	-	12
	ZOO/MJ/651-T		2		2	-	
	ZOO/MJ/652-T		2	-	2	-	
	ZOO/MJ/653-p		-	4	-	2	
	ZOO/MJ/654-P		-	4	-	2	
	ZOO/MJ/655-P		-	4	-	2	
DSE (Choose any one from pool of courses)	ZOO/DSE/656-T		2	-	2	-	04
	ZOO/DSE/657-P		-	4	-	2	
RP	ZOO/RP-2/658-P		-	12	-	6	04
			08	28	08	14	22 credits

1. Major Mandatory (DSC)

ZOO/MJ/650-T
ZOO/MJ/651-T
ZOO/MJ/652-T
ZOO/MJ/653-p
ZOO/MJ/654-P
ZOO/MJ/655-P

2. Discipline Specific Elective Course (DSC) (Choose any one from basket)

ZOO/DSE/656-T

ZOO/DSE/657-P

OR

3. Research Project (RP-2): ZOO/RP-2/658-

3. Vision
4. Mission
5. Programme educational Objectives
6. Programme outcomes (POs) and Programme Specific Outcomes
7. Eligibility
8. Duration
9. Medium of Instruction
10. Attendance
11. Evaluation Methods/Scheme of Examination
12. Curriculum for semester-I
13. Curriculum for semester-II
14. Curriculum for semester-III
15. Curriculum for semester-IV

Template for the designing curriculum of various courses/papers

Name of Course (Subject): -----

Subject Code: -----

1. Introduction-----
2. Course Objective (CO) ----
3. Program Objective (POs)
4. Programme Specific Objective (PSO)

Total-Credits -2

Total Marks -50

Sr. No	Title	Credits	Clock Hours	Marks
1		10	10	10
2		10	10	10
3		10	10	10

Total Period -30

5. List of Text Books

6. List of Reference Books

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Course Structure and Curriculum

(Outcome Based Credit System)

Subject: -----

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11	Evolution Methods /Scheme of examination	
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14	Curriculum- Semester-III	
15	Curriculum- Semester-IV	

1. Preamble

2. Structure

Two-Year Post-graduate Program

Course and Credits Distribution of Two years Master's Degree Program with Entry & Exit Option

Faculty of Science & Technology

Year / level	Sem.	Major subject		RM	OJT /FP	RP	Credits	Degree
		DSC Core Mandatory	DSE (Elective)					
First year 6.0	I	3(4) +2=14	4	4			22	PG Diploma (after 3 years degree)
	II	3(4) +2=14	4		4 Complete during summer break		22	
	Cum. Cr. For PG Diploma		28	08	4	4		
Exit option with Post-graduate Diploma (44 credits) after first year or two semester with completion of courses equivalent to 44 credits								
Second Year 6.5	III	3(4)+2=14	4			4	22	PG Degree after 3 years UG or PG Degree after 4 years UG
	IV	3(4)=12	4			6	22	
Cum. Cr. For 1 year PG Degree		26	8			10	44	
Cum. Cr. For 2 years PG Degree		54	16	4	4	10	88	
2 Years -4 sem.PG Degree (88 credits) after three year UG Degree or 1 Year -2 sem. PG Degree (44 credits) after four year UG degree								

Discipline Specific Core (DSC) –Mandatory Major: A course, which should compulsorily be studied by the student as requirement of core or major subject is termed as a core course.

Discipline Specific Core (DSE): Generally, a course which can be chosen from a pool of course and which may be very specific or specialized or advanced or supportive to the discipline/subject of study or which provides an extended scope or which enables an exposure to some other discipline/subject/domain or nurtures the candidates proficiency/skill is called as elective course.

OJT: On-the- Job Training

FP: Field Project/Internship/Apprenticeship (Corresponding to the Major (Core) Subject

RP:-Research Project Corresponding to the Major (Core) Subject

AS PER NEP 2020

Illustrative Credit distribution structure for Two Years P.G. Programme

Class: M.Sc. First Year

Semester: Ist Semester

Course type	Course Code	Course Name	Teaching Scheme (Hrs./ week)		Credits Assigned		Total Credits
			Theory	Pract.	Theory	Pract	
Major Mandatory DSC	ZOO/MJ/500		3	-	3	-	14
	ZOO/MJ/501		3	-	3	-	
	ZOO/MJ/502		3	-	3	-	
	ZOO/MJ/503	Practical based on ZOO/MJ/500	-	2	-	1	
	ZOO/MJ/504	Practical based on ZOO/MJ/501	-	2	-	1	
	ZOO/MJ/505	Practical based on ZOO/MJ/502	-	2	-	1	
	ZOO/MJ/506	Skill/advance technique	-	4	-	2	
DSE (Choose any one from pool of courses)	ZOO/DSE/507		3	-	3	-	04
	ZOO/DSE/508	Practical based on ZOO/DSE/507	-	2	-	1	
RM	ZOO/RM/509	RM (Part-I, Part-II)	4	-	4	-	04
			16	12	16	06	22 credits

1. Major Mandatory (DSC):-

ZOO/MJ/500: -----
 ZOO/MJ/501: -----
 ZOO/MJ/502:-----
 ZOO/MJ/503:-----
 ZOO/MJ/504: -----
 ZOO/MJ/505:-----
 ZOO/MJ/506:-----

2. Discipline Specific Elective (DSE): (Choose any one from basket)

ZOO/DSE/507:-
 ZOO/DSE/508:-
 OR
 ZOO/DSE/509:-
 ZOO/DSE/510:-
 Or

3. Research Methodology - ZOO/RM/509: -----

Class: M.Sc. First Year**Semester: II Semester**

Course type	Course Code	Course Name	Teaching Scheme (Hrs./ week)		Credits Assigned		Total Credits
			Theory	Practical	Theory	Practical	
Major Mandatory DSC	ZOO/MJ/550		3	-	3	-	14
	ZOO/MJ/551		3	-	3	-	
	ZOO/MJ/552		3	-	3	-	
	ZOO/MJ/553	Practical based on ZOO/MJ/550	-	2	-	1	
	ZOO/MJ/554	Practical based on ZOO/MJ/551	-	2	-	1	
	ZOO/MJ/555	Practical based on ZOO/MJ/552	-	2	-	1	
	ZOO/MJ/556	Skill/advance technique	-	4	-	2	
DSE (Choose any one from pool of courses)	ZOO/DSE/557		3	-	3	-	04
	ZOO/DSE/558	Practical based on ZOO/DSE/557	-	2	-	1	
OJT/FP	OO/OJT/559	OJT/FP		4		4	04
			12	16	12	10	22 credits

1. Major Mandatory (DSC): -----

ZOO/MJ/550: -----
 ZOO/MJ/551: -----
 ZOO/MJ/552: -----
 ZOO/MJ/553: -----
 ZOO/MJ/554: -----
 ZOO/MJ/555: -----
 ZOO/MJ/556: -----

2. Discipline Specific Elective - (Choose any one from basket)

ZOO/DSE/557
 ZOO/DSE/558
 Or
 ZOO/DSE/559
 ZOO/DSE/560
 Or

3. OJT/FP-1: ZOO/OJT/559: -----

Class: M.Sc. Second Year
Semester: III Semester

Course type	Course Code	Course Name	Teaching Scheme (Hrs./ week)		Credits Assigned		Total Credits
			Theory	Practical	Theory	Practical	
Major Mandatory DSC	ZOO/MJ/600		3	-	3	-	14
	ZOO/MJ/601		3	-	3	-	
	ZOO/MJ/602		3	-	3	-	
	ZOO/MJ/603	Practical based on ZOO/MJ/600	-	2	-	1	
	ZOO/MJ/604	Practical based on ZOO/MJ/601	-	2	-	1	
	ZOO/MJ/605	Practical based on ZOO/MJ/602	-	2	-	1	
	ZOO/MJ/607	Skill/advance technique	-	4	-	2	
DSE (Choose any one from pool of courses)	ZOO/DSE/608		3	-	3	-	04
	ZOO/DSE/609	Practical based on ZOO/DSE/608	-	2	-	1	
RP	ZOO/RP-1/649	Research Project-1		8	-	4	04
			12	20	12	10	22 credits

1. Major Mandatory (DSC)

ZOO/MJ/600: -----
 ZOO/MJ/601:-----
 ZOO/MJ/602:-----
 ZOO/MJ/603: -----
 ZOO/MJ/604:-----
 ZOO/MJ/605:-----
 ZOO/MJ/607:-----

2. Discipline Specific Elective (DSE) : (Choose any one from basket)

- ZOO/DSE/608:-----
 ZOO/DSE/609:-----
 Or
- ZOO/DSE/608:-----
 ZOO/DSE/609:-----
 Or

3. Research Project-1 - ZOO/RP-1/649: -----

Class: M.Sc. Second Year**Semester: IV Semester**

Course type	Course Code	Course Name	Teaching Scheme (Hrs./ week)		Credits Assigned		Total Credits
			Theory	Practical	Theory	Practical	
Major Mandatory DSC	ZOO/MJ/650		3	-	3	-	12
	ZOO/MJ/651		3	-	3	-	
	ZOO/MJ/652		3	-	3	-	
	ZOO/MJ/653	Practical based on ZOO/MJ/650	-	2	-	1	
	ZOO/MJ/654	Practical based on ZOO/MJ/651	-	2	-	1	
	ZOO/MJ/655	Practical based on ZOO/MJ/652	-	2	-	1	
DSE (Choose any one from pool of courses)	ZOO/DSE/656		3	-	3	-	04
	ZOO/DSE/657	Practical based on ZOO/DSE/656	-	2	-	1	
RP	ZOO/RP-2/699	RP-2		12	-	6	06
			12	20	12	10	22 credits

1. Major Mandatory (DSC) : -----

ZOO/MJ/650: -----

ZOO/MJ/651:-----

ZOO/MJ/652:-----

ZOO/MJ/653: -----

ZOO/MJ/654:-----

ZOO/MJ/655:-----

2. Discipline Specific Elective (DSE) (Choose any one from basket)**1.** ZOO/DSE/656:-----

ZOO/DSE/657:-----

Or

2. ZOO/DSE/658:-----

ZOO/DSE/659:-----

Or

3. Research Project -2(RP-2): ZOO/RP-2/699

3. Vision
4. Mission
5. Programme educational Objectives
6. Programme outcomes (POs) and Programme Specific Outcomes
7. Eligibility
8. Duration
9. Medium of Instruction
10. Attendance
11. Evaluation Methods/Scheme of Examination
12. Curriculum for semester-I
13. Curriculum for semester-II
14. Curriculum for semester-III
15. Curriculum for semester-IV

Template for the designing curriculum of various courses/papers

Name of Course (Subject): -----

Subject Code: -----

1. Introduction-----
2. Course Objective (CO) ----
3. Program Objective (POs)
4. Programme Specific Objective (PSO)

Total- Credits: 03

Contact Hours: 45 (Clock hours)

Marks: 75

Sr. No	Title	Credits	Clock Hours	Marks
1		09	09	
2		09	09	
3		09	09	
4		09	09	
5		09	09	

5. List of Text Books

6. List of Reference Books