

QUESTION PAPER DESIGN

Mathematics (311)

Maximum Marks: 100

Time: 3Hrs.

1. Weightage by Objectives

S. No.	Objectives	Marks	% of Total Marks
1.	Knowledge	30	30%
2.	Understanding	40	40%
3.	Application	22	22%
4.	Skill	8	8%

2. Weightage by type of Questions

Sl. No.	Type of question	No. of questions	Marks per question	Marks
1.	MCQ (1 mark)	20	1	20
2.	Objective Type Questions (1*2 = 2 marks) (with 2 sub-parts of 1 mark each)	4	2	8
3.	Objective Type Questions (1*4 = 4 marks) (with 4 sub-parts of 1 mark each)	4	4	16
4.	Objective Type Questions (1*6 = 6 marks) (with 6 sub-parts of 1 mark each)	1	6	6
	Total	29		50
5.	Very Short Answer (2 marks questions)	9	2	18
6.	Short Answer(SA) (4 marks questions)	5	4	20
7.	Long Answer(LA) (6 marks questions)	2	6	12
	Total	16		50
	G. Total	45		100

In subjective questions: 4 Questions of 2 marks (VSA), 2 Questions of 3 marks (SA), 2 Questions of 6 marks (LA) will have internal choices.

3. Weightage to difficulty level of question

Estimated Level	Marks	Percentage of marks
Difficulty	20	20
Average	50	50
Easy	30	30
Total	100	100

4. Weightage by Content

Sl.	Module	Marks
1.	Co-ordinate Geometry	15
2.	Algebra-II	17
3.	Relations and Functions	12
4.	Calculus	30
5.	Vectors and Three Dimensional Geometry	17
6.	Linear Programming and Mathematical Reasoning	9
Total		100