

CLASS – XII
Subject -Mathematics
Semester I

Theory Marks- 70
CCE/Internal Assessment -10
Total Marks -80

Structure of question paper.

1. All questions are compulsory.
2. Q.1 will consist of eight parts and each part will carry 1 mark.
3. Q.2 to Q.15 each will be of 3 Marks.
4. Q.16 to Q.19 i.e. four questions each will be of 5 Marks.
5. There will be no overall choice. There will be an internal choice in any three questions of 3 Marks each and any two questions of 5 Marks each.
(Total of 5 internal choices)
6. Use of Calculator is not allowed.

S.No.	Topic	Q.Carrying 1-Marks	Q.Carrying 3-Marks	Q.Carrying 5-Marks	Total Marks
1	Relation and Functions	1	3	-	10
2	Inverse Trigonometric Function	1	2	-	07
3	Matrices	2	2	1	13
4	Determinants	2	1	1	10
5	Continuity and Differentiability	1	4	1	18
6	Applications of Derivatives	1	2	1	12
	Total	8	14	4	70

Topics under syllabus of semester-I

1.	Relations and Functions	10
2.	Inverse Trigonometric-Functions	07
3.	Matrices	13
4.	Determinants	10
5.	Continuity and Differentiability	18
6.	Applications of Derivatives	12
	Total Marks	70

Mathematics Semester II

Theory Marks- 100
CCE/Internal Assessment -20
Total Marks -120

Structure of question paper

1. All questions are compulsory.
2. Q.1 will consist of ten parts. Out of these, four parts will be from the syllabus of Ist semester. Each part (sub question) will carry 1-mark.
3. Q.2 to Q.16 will carry four marks each.
4. Q.17 to Q.21 i.e. five questions each will be of six marks.
5. There will be no over all choice. There will be an internal choice in any three questions of four marks each and any two questions of 6 mark each.
6. Use of calculator is not allowed.

S.No.	Topic	Q.Carrying 1-Mark	Q.Carrying- 4-Marks	Q.Carrying 6-Marks	Total Marks
1	Integrals	1	4	1	23
2	Applications of integrals	1	1	1	11
3	Differential Equations	1	3	-	13
4	Vectors	1	3	-	13
5	Three-dimensional Geometry	1	2	1	15
6	Linear Programming	-	-	1	06
7	Probability	1	2	1	15
	Total	6	15	5	96
	Total number of questions from syllabus of Ist Semester	4	-	-	4
	G.Total	10	15	5	100

Topics under syllabus of semester-II

1.	Integrals	23
2.	Applications of Integrals	11
3.	Differential Equations	13
4.	Vectors	13
5.	Three Dimensional Geometry	15
6.	Linear Programming	06
7.	Probability	15
	Total	96
	{From Ist Semester 4 questions of 1 mark each}	04
	G.Total	100

NOTE: Any further detail regarding the content of the syllabus can be seen from the Senior Secondary Examination Syllabus for Class-XII published by Punjab School Education Board Mohali.