XI Mathematics Commerce Part I

Competency statements

Sr. No	Area	Topic	Competency Statements
1	Sets and Relations	Sets	 The student will be able to work with sets and set functions. construct sets from given conditions/description/rule. solve problems using set theory.
		Relations	 identify the types of relations. use relations to associate different sets. verify equality, equivalence or other relationships between given sets.
2	Functions	Functions	 work with function defined on different domains. identify different types of functions. carry out complicated operations on functions.
3	Complex Numbers	Complex Numbers	simplify algebraic expressions involving complex numbers.
4	Sequence and series	Sequence	identify the type of a given sequence.find the general term of given sequence.
		Series	 identify the type of a given series find the nth term of a given series find the sum of the first n terms of a given series find the sum to infinite terms of a given series
5	Locus and Straight Line	Locus and Straight Line	 find equation of a straight line satisfying given conditions identify properties of given set of straight lines
6	Determinants	Determinants	 find value of a determinant. simplify determinant. solve linear equations in 2/3 variables, find area of triangle using determinants.
7	Limits	Limits	 find limit of a function determine whether a given function has a limit
8	Continuity	Continuity	 determine whether a given function is continuous at a given point determine whether a given function is continuous over a specified interval identify points of discontinuity of a given function
9	Differentiation	Differentiation	differentiate algebraic functions