



## CLASS – 11

### MATHS PRACTICAL WORK

#### GENERAL INSTRUCTIONS:

1. Please do all the activities in MODERN'S abc lab manual.
2. Draw the diagrams and write observations with pencil on the blank side of file. Paste the graphs (if required).
3. On the ruled side write objective, material required, steps of construction (or procedure), demonstration and conclusion with a pen.
4. The following 10 activities have to be done :

a) To find the number of subsets of a given set and verify that if a set has  $n$  number of elements, then the total number of subsets is  $2^n$ .

b) To distinguish between a Relation and Function.

c) To interpret geometrically the meaning of  $i = \sqrt{-1}$  and its integral powers.

d) To find the number of ways in which three cards can be selected from the given five cards.

e) To demonstrate that the Arithmetic mean of two different numbers is always greater than the Geometric mean.

f) To construct a parabola.

g) To construct an ellipse when two fixed points are given.

h) To explain the concept of octants by three mutually perpendicular planes in space.

i) To find  $\lim_{x \rightarrow c} f(x)$  when  $f(x) = \frac{x^2 - c^2}{x - c}$

j) To write the sample space, when a coin is tossed once, twice, three times,.....

5. All the activities should be completed by the first week of November 2020 .

6. Please note that this lab manual will carry weightage of 10 marks in the internal assessment.