## PRESIDENCY UNIVERSITY BENGALURU

## SCHOOL OF ENGINEERING <br> END TERM EXAMINATION - JUN 2023

Semester : Semester II - 2022
Course Code : MEC1006
Course Name : Sem II - MEC1006 - Engineering Graphics
Program : B.Tech - All Programs

Date: 9-JUN-2023
Time : 1.00PM - 4.00PM
Max Marks : 100
Weightage : 50\%

## Instructions:

(i) Read all questions carefully and answer accordingly.
(ii) Question paper consists of 3 parts.
(iii) Scientific and non-programmable calculator are permitted.
(iv) Do not write any information on the question paper other than Roll Number.

PART A

## ANSWER ALL THE QUESTIONS

(20M)

1. A point M is on HP and 30 mm infront of VP. Another point N is 20 mm below HP and 20 mm infront of VP. The distance between their projectors measured parallel to $X Y$ line is 50 mm . Find the distance between front views of the point M and N .
(CO2) [Knowledge]
2. Line $A B$ is 75 mm long and it is $30^{\circ}$ \& $40^{\circ}$ Inclined to $H P$ \& VP respectively. End $A$ is 12 mm above HP and 10 mm in front of VP. Draw projections. Line is in 1st quadrant..
(CO2) [Knowledge]

## PART B

## ANSWER ALL THE QUESTIONS

(60M)
3. A Hexagonal prism of 25 mm sides of base and 50 mm axis length rests on HP on one of its corners of the base such that the two base edges containing the corner on which it rests make equal inclinations with HP. Draw the Projections of the prism when the axis of the prism inclined to $40^{\circ}$ to HP and appears to be inclined to VP at $45^{\circ}$.
(CO3) [Comprehension]
4. A square lamina $A B C D$ of 40 mm side rests on corner $C$ such that the diagonal $A C$ appears to be inclined at $45^{\circ}$ to $V P$. The two sides $B C$ and $C D$ containing the corner $C$ make equal inclination with HP. The surface of the lamina makes $30^{\circ}$ with HP. Draw its top and front views.
(25M)

## PART C

## ANSWER THE FOLLOWING QUESTION

5. A rectangular pyramid of base $40 \mathrm{~mm} \times 20 \mathrm{~mm}$ and height 50 mm is placed centrally on a rectangular slab sides $80 \mathrm{~mm} \times 60 \mathrm{~mm}$ and thickness 30 mm . Draw the isometric projection of the combination.
