## PRESIDENCY UNIVERSITY

BENGALURU
SET A

## SCHOOL OF ENGINEERING <br> END TERM EXAMINATION - JAN 2024

Semester: Semester I-2023
Date : 19-JAN-2024
Course Code : MEC1006
Time : 9:30AM - 12:30 PM
Course Name : Engineering Graphics
Max Marks : 100
Program : B.Tech.
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

1. Draw the projections of the following points on the same reference $X Y$ Line and state the quadrants in which they lie
$\mathrm{E}-35 \mathrm{~mm}$ infront of VP \& on HP
F - 30 mm below HP \& 25 mm behind VP
G- 15 mm above $\mathrm{HP} \& 25 \mathrm{~mm}$ behind VP
$\mathrm{H}-30 \mathrm{~mm}$ below HP and 25 mm infront of VP
2. 

A Line AB 75 mm long has its end A 20 mm above the HP and 30 mm infront of VP, it is inclined at $30^{\circ}$ to HP and $45^{\circ}$ to VP. Draw the Projections of the line and find apparent lengths and apparent angles.
(CO2) [Knowledge]

## PART B

## ANSWER ALL THE QUESTIONS

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(25+20=45)
$$

3. A pentagonal lamina of edges 30 mm is resting on HP with one of its sides, such that the surface makes an angle of $50^{\circ}$ to HP. The edge on which it rests is inclined at $40^{\circ}$ to VP. Draw its projections
4. A rectangular slab base ( $\mathbf{1 2 0} \mathbf{x} \mathbf{8 0}$ ) $\mathbf{m m}$ and thickness 30 mm has a full depth of co axial square hole 40 mm such that one of the sides of the square is parallel to one of the sides of the rectangle. Draw the isometric projections.
(CO4) [Comprehension]

## PART C

## ANSWER ALL THE QUESTIONS

5. Square prism, base 35 mm side and height 65 mm , has its axis inclined to $\mathrm{HP} 50^{\circ}$ and has an edge of its base on the HP and inclined at $30^{\circ}$ to VP. Draw its projections.
(CO3) [Application]
