

Roll No



**PRESIDENCY UNIVERSITY
BENGALURU**

SET - B

**SCHOOL OF ENGINEERING
END TERM EXAMINATION - FEB 2023**

Semester : Semester I - 2022

Course Code : MEC1006

Course Name : Sem I - MEC1006 - Engineering Graphics

Program : B.Tech - (All Programs)

Date : 24-FEB-2023

Time : 9.30AM - 12.30PM

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. Draw the projections of the following points on the same XY line, keeping a distance of 25 mm between projectors. Name the Quadrants in which they lie. [8M]
A - On VP & 40 mm above HP
B - 40 mm below HP & on VP
C - 40 mm behind VP & On HP
D - On HP & 40 mm in front VP
(CO1) [Knowledge]
2. Line AB is 80 mm long and it is 30 degrees inclined to HP & 45 degrees Inclined to VP. End A is 10 mm above HP and 15 mm in front of VP. Draw projections of the line considering the line is in first quadrant. Also show front view length, top view length, true length and all the inclinations with HP and VP in the projection. [12M]
(CO2) [Knowledge]

PART B

ANSWER ALL THE QUESTIONS

(45M)

3. A pentagonal lamina of edges 30mm is resting on HP with one of its sides, such that the surface makes an angle of 45 degrees with HP. The edge on which it rests is inclined at 60 degrees to VP. Draw its projections. [25M]
(CO3) [Comprehension]

4. A square pyramid of base side 40mm and height 50mm is placed centrally on a rectangular slab sides 80mmx60mm and thickness 30mm. Draw the isometric projection of the combination. [20M]
(CO5) [Comprehension]

PART C

ANSWER THE FOLLOWING QUESTION

(1 X 35 = 35M)

5. A square prism, base 30 mm side and height 60 mm, has its axis inclined at 45 degrees to HP and has an edge of its base on the HP and inclined at 45 degrees to VP. Draw its projections.
(CO4) [Application]