PRESIDENCY UNIVERSITY
BENGALURU

SET B

SCHOOL OF ENGINEERING
END TERM EXAMINATION - JAN 2024

Semester : Semester I - 2023
Course Code : MEC1006
Course Name : Engineering Graphics
Program : B.Tech.

Date : 19-JAN-2024
Time : 9:30AM - 12:30 PM
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   (8 + 12 = 20)

1. Draw the projections of the following points on the same reference XY Line and state the quadrants in which they lie

   E – 35 mm below HP & on VP

   F – 30 mm above HP & 25 mm in front   VP

   G- 15 mm above HP & 25 mm behind VP

   H- 30 mm below HP and 25 mm behind VP

   (CO2) [Knowledge]

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 40°to HP and 35° to VP. Draw the Projections of the line and find apparent lengths and its inclinations.

   (CO2) [Knowledge]

PART B

ANSWER ALL THE QUESTIONS **(25 + 20 = 45)**

3. A pentagonal lamina of edges 30 mm is resting on HP with one of its corners such that the edge opposite to the corner is 15 mm above HP and makes an angle of 40° to VP. Draw the front, and top views of the plane lamina in this position. Determine the inclination of the lamina with HP

(CO2) [Comprehension]

4. A sphere of 60 mm diameter rests centrally on top of a cube of side 60 mm . Draw isometric projection of solids.

(CO4) [Comprehension]

PART C

ANSWER ALL THE QUESTIONS **(1 X 35M = 35M)**

5. Square prism 30 mm sides of base and 60 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 makes equal inclination with HP. Draw the projections of the prism when the axis of the prism is inclined to 40° HP and appears to be inclined at 45° to VP

(CO3) [Application]