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VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN
(An Autonomous Institution)

I-B.Tech.-I-Semester Regular Examinations, February-2025

COMPUTER AIDED ENGINEERING GRAPHICS

CSE [DS]

Time: 3 Hours

Max. Marks: 60

(Answer All Questions)

Note: Question paper consists of Part-A & Part-B.

- **Part-A** for 10M, ii) **Part-B** for 50marks
- **Part A** is compulsory, consists of 10 sub questions from all units carrying equal marks.
- **Part-B** consists of **10 questions** (numbered from 2 to 11) carrying **10marks** each. From each unit there are 2 questions and the students should answer one of them. Hence the student should answer **5 questions** from **Part-B**.

PART-A

(10Marks)

- 1 a. What is representative fraction? **1M**
- 1 b Define cycloid? **1M**
- 1 c. What are the types of projections? **1M**
- 1 d Draw the projection of 60 mm long straight line which is situated both on HP and VP **1M**
- 1 e. What is a profile plane? **1M**
- 1 f. Write two differences between a prism and pyramid? **1M**
- 1 g. Define development of surfaces? **1M**
- 1 h Identify the application of development of surfaces **1M**
- 1 i. Draw the isometric view of square with side 40mm in T.V. **1M**
- 1 j. Distinguish between isometric view and isometric projection. **1M**

PART-B

(50Marks)

- 2 Draw A parabola with the distance between directrix and focus as 60 mm. Draw normal and tangent at any point on the curve. **10M**
OR
- 3 The distance between two towns is 250 km and is represented by a line of length 50mm on a map. Construct a scale to read 600 km and indicate a distance of 530 km on it. **10M**
- 4 A line AB of length 70 mm is inclined at an angle 30° to the HP and 45° to the VP the end A is 20 mm above HP and 30 mm in front of VP **10M**
draw the projection of the line.
OR
- 5 Draw the projection of a triangular lamina of side 50 mm which has a side parallel to the HP and inclined at 45° to the VP the surface is inclined at 30° to the HP **10M**
- 6 A pentagonal prism of base side 30 mm and axis 60 mm has an edge **10M**

of its base on the VP and inclined 45° to the HP its axis is inclined to inclined at 30° to the VP draw its projections.

OR

- 7 A hexagonal pyramid of base side 30 mm and axis 60 mm has an edge of its base on the ground inclined at 45° to the VP and the axis is inclined 30° to the HP draw its projections **5M**

- 8 A pentagonal prism side of base 30 mm and axis is 70 mm is resting on HP on its base. It is cut by a sectional plane perpendicular to VP and at 30° to HP and passing through the midpoint of the axis of the pyramid. Draw the development of the lateral surface of the truncated pyramid. **10M**

OR

- 9 Draw the development of the lateral surface of a square pyramid, of side 40 mm and axis 60 mm resting on its base on the HP such that all the sides of the base are equally inclined to the VP. **10M**

- 10 Prepare an isometric view of the object shown in figure 1. All the dimensions are in mm.

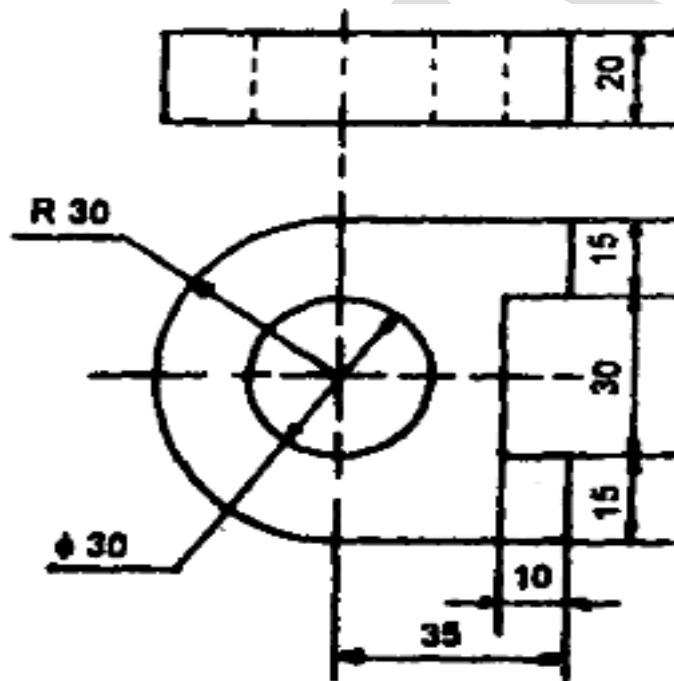


Figure: 1

OR

- 11 Draw the a) Front view b) Top view of the figure 2. All dimensions are in mm. **10M**

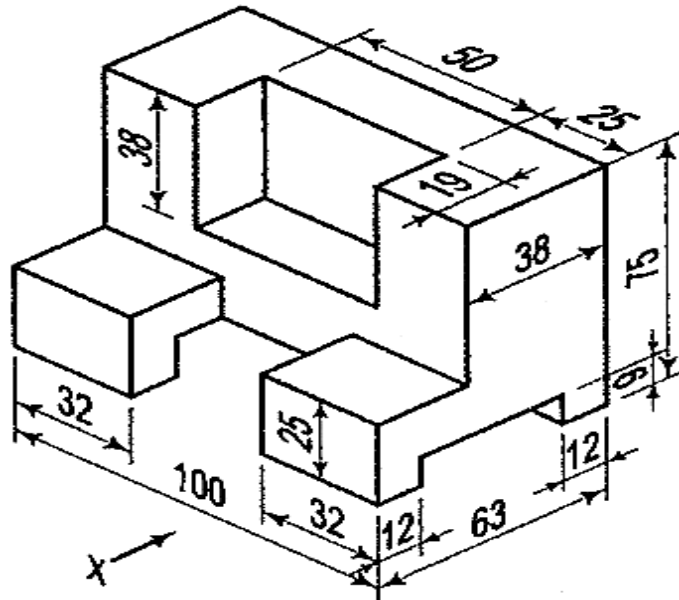


Figure: 2

VMTW