

Roll No.

Total No. of Questions : 9]

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Paper ID [A0114]

(Please fill this Paper ID in OMR Sheet)

B.Tech. (Sem. - 1st/2nd)

ENGINEERING DRAWING (ME - 102)

Time : 03 Hours

Maximum Marks : 60

Instruction to Candidates:

- 1) Section - A is **Compulsory**.
- 2) Attempt any **Five** questions from Section - B & C.
- 3) Select atleast **Two** questions from Section - B & C.

Section - A

Q1)

(2 Marks Each)

- a) Why the projections of an object are not drawn in 2nd and 4th quadrants?
- b) Name the different styles of lettering?
- c) Name the various dimensioning techniques?
- d) Draw a symbol of third angle projections.
- e) What is a plane lamina?
- f) What is the trace of a straight line?
- g) What is difference between cylinder and a cone?
- h) How many numbers of equal faces are in octahedron?
- i) Define refraction fraction (R.F.)?
- j) Draw the dimension line?

Section - B

(8 Marks Each)

Q2) Write in double stroke vertical and inclined style, the following statement using ratio 7 : 4

GOLDEN TEMPLE

Q3) A square prism, base of 40 mm side, axis 70 mm long, is resting on its base ^{^1} HP. One side of the base is inclined at 60° to VP. Draw its projections?

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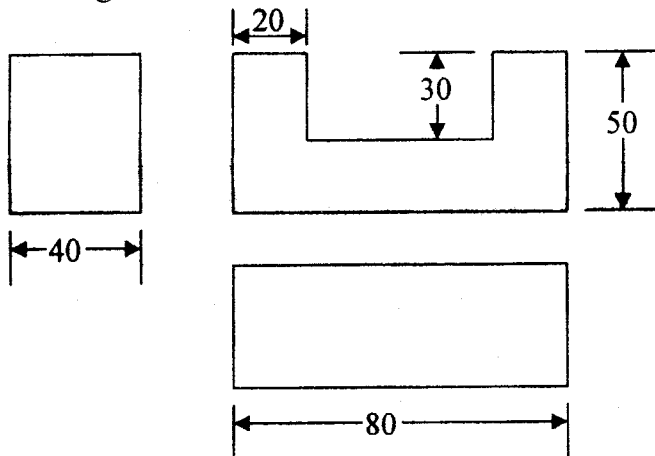
P.T.O.

- Q4)** A point P is 30 mm above the HP and 40 mm in front of VP. Draw its projections.
- Q5)** A pentagon pyramid of 30 mm base edges and axis 70 mm long, resting on its base on the HP having a side of base perpendicular to VP. It is cut by a section plane parallel to VP and 10 mm away from the axis. Draw its sectional plane and elevation?

Section - C

(8 Marks Each)

- Q6)** Construct a scale having R.F. = 1 : 400 to show meters and long enough to measure up to 60 meters. Measure a distance of 44 meters on the scale?
- Q7)** A vertical square prism of 60 mm base and axis length of 110 mm is resting on one of its square base on ground and having its two rectangular faces equally inclined to VP. A horizontal square hole of side 40 mm is drilled through it such that the axes of both the prism and the hole bisect each other at right angle. The faces of the hole are equally inclined to HP. Draw the projection of the combination and show the lines of intersection.
- Q8)** Incomplete the orthographic projection of an object as shown in Figure. Draw the missing lines in these views.



- Q9)** A pentagon prism of side 50 mm and 130 mm height is resting on its base with one of the vertical faces which is away from the observer parallel to VP. A vertical bore of 74 mm diameter is cut through its face so that the axis of the hole is bisecting the axis of the prism and is parallel to HP and VP. Draw the development of the lateral surface of the prism.

