C09-C-107

3017

BOARD DIPLOMA EXAMINATION, (C-09)

OCT/NOV—2014

DCE—FIRST YEAR EXAMINATION

ENGINEERING DRAWING

Time : 3 hours] [*Total Marks* : 60

PART—A

5×4=20

Instructions : (1) Answer **all** questions.

(2) Each question carries **five** marks.

(3) All dimensions are in mm.

1. Write the following in 10 mm vertical capital letters :

"GOVERNMENT POLYTECHNIC"

2. Redraw the Fig. 1 shown below to full size and dimension it according to SP:46-1988 :

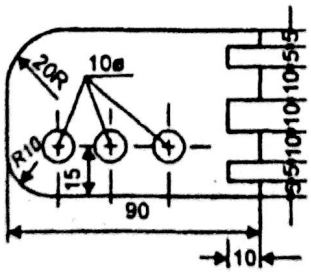

Fig. 1

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PART—B

10×4=40

Instructions : (1) Answer *any* **four** questions.

(2) Each question carries **ten** marks.

(3) All dimensions are in mm.

5. Draw the involute of a circle of diameter 48 mm.

6. Draw the projection of a regular hexagon of 25 mm side having one of its sides in the HP and inclined at 60° to the VP and its surface making an angle of 45° to the HP.

7. Draw the front view, top view, side view of the object shown in Fig. 4 :

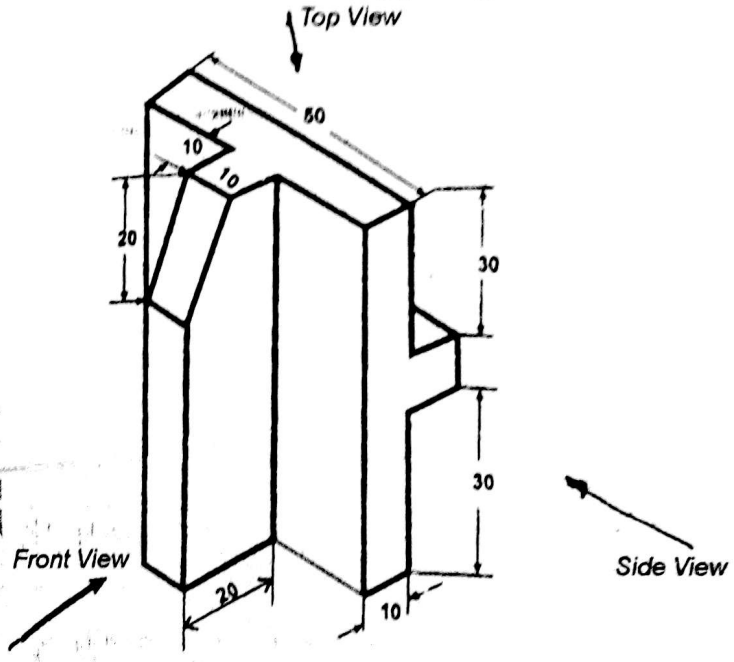

Fig. 4

8. A hexagonal pyramid stands on HP with one of its base edges parallel to the VP. The pyramid is cut by a plane passing through the midpoint of the vertical height when at an angle of 30° to the HP and perpendicular to the VP. Draw the sectional top view and true shape of the section.

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3. Draw the front view of the object shown in Fig. 2 :

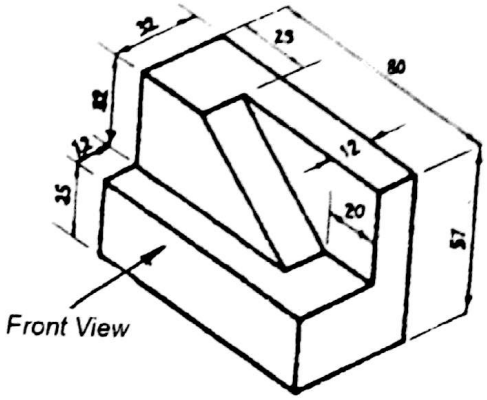

Fig. 2

4. Draw the auxiliary view of inclined portion of the object shown in Fig. 3 :

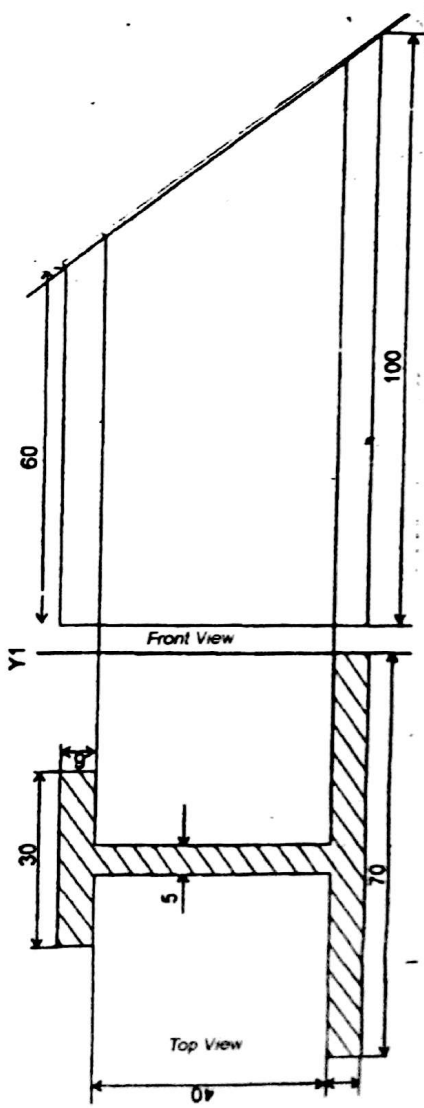

Fig. 3

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9. Draw the isometric projection of the object the views of which are given in Fig. 5 :

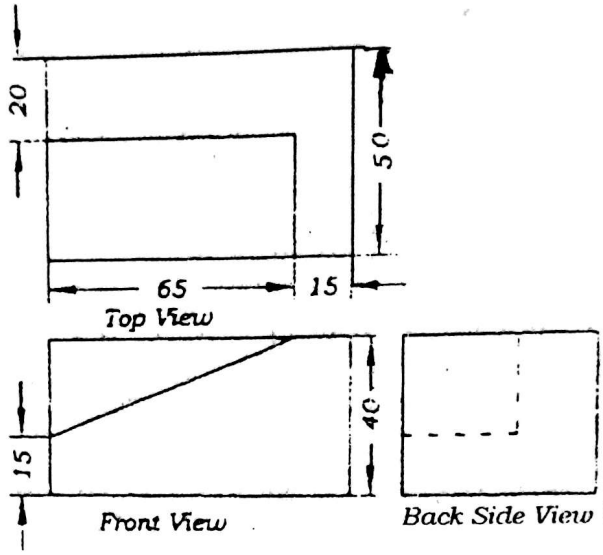

Fig. 5

10. A cone of base diameter 40 mm and slant height 60 mm is standing vertically on HP. It is cut by a plane which is inclined at 45° to HP, perpendicular to VP and passing through the midpoint of the axis. Develop the lateral surface of the truncated cone.

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