Total No. of Questions—**8**] [Total No. of Printed Pages—**4+1**

Seat No.	

[4756]-105

F.E. (First Semester) EXAMINATION, 2015

ENGINEERING GRAPHICS-I

(2012 PATTERN)

Time : Two Hours **Maximum Marks : 50**

N.B. :— (*i*) Answer Q. No. **1** *or* Q. No. **2**, Q. No. **3** *or* Q. No. **4**, Q. No. **5** *or* Q. No. **6**, Q. No. **7** *or* Q. No. **8**.

(*ii*) Figures to the right indicate full marks.

(*iii*) Assume suitable data if necessary.

(*iv*) Retain construction lines.

(*v*) Marks are reserved for dimensioning and good presentation.

1. The TV of a 80 mm long line AB measures 50 mm. The point A is 50 mm in front of VP and 20 mm above HP. The point B is 20 mm in front of VP and is above HP. Draw the projection of line AB and find its inclination with the HP and VP also locate its traces. [12]

P.T.O.

Or

2. A thin rectangular plate of size 70 mm × 40 mm appears as a square of side 40 mm in TV with one of its side inclined at 30° to VP and parallel to HP. Draw the projection of the plate and determine its inclination with HP. [12]

3. A pentagonal prism of base 30 mm side and axis 60 mm long is resting on a corner of its base on HP with a longer edge containing that corner inclined at 45° to the HP and vertical plane containing that edge and axis inclined at 30° to the VP. Draw its projection. [13]

Or

4. (*a*) Draw an involute of a circle of 50 mm diameter. [7]

(*b*) A right circular cone of a base diameter 50 mm and axis height 60 mm has its base on HP. Draw the development of lateral surface of cone. [6]

5. The following Fig. 1 shows a Cast iron bracket. By using first angle projection method draw : [13]

(*i*) Front View

(*ii*) Top View

(*iii*) Sectional LHSV along plane X-X.

Give all the dimensions [13]

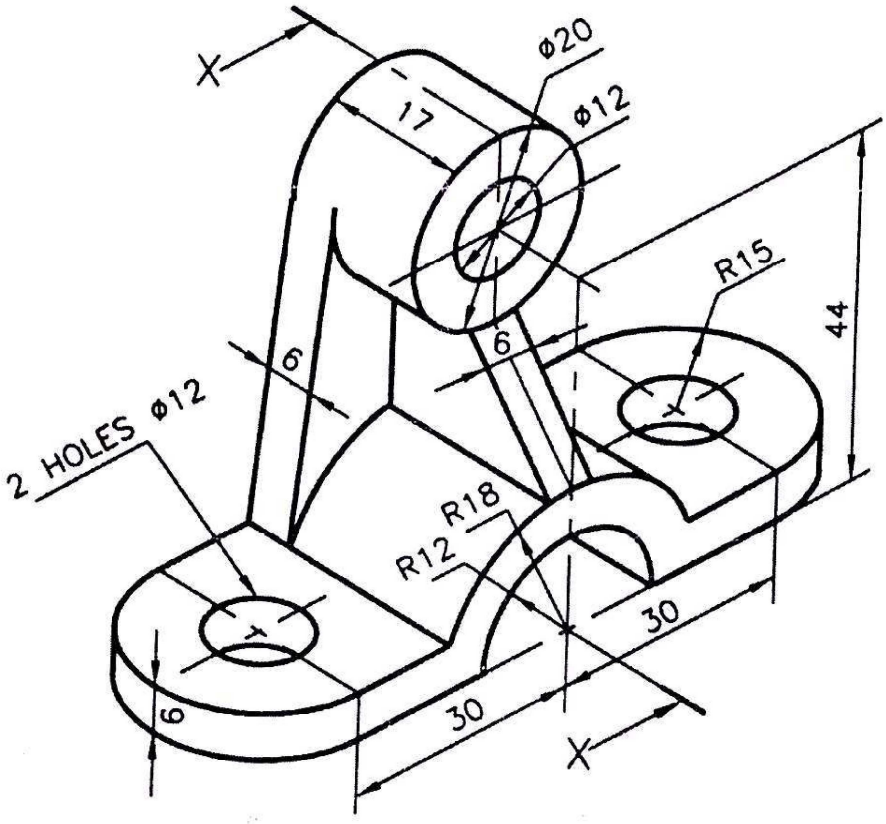

Fig. 1 C.I. Bracket

Or

6. The following Fig. **2** shows a cast iron bracket. By using first angle projection method, draw : [13]

(*i*) Sectional front view

(*ii*) Top view

(*iii*) RHSV

Give all the dimensions

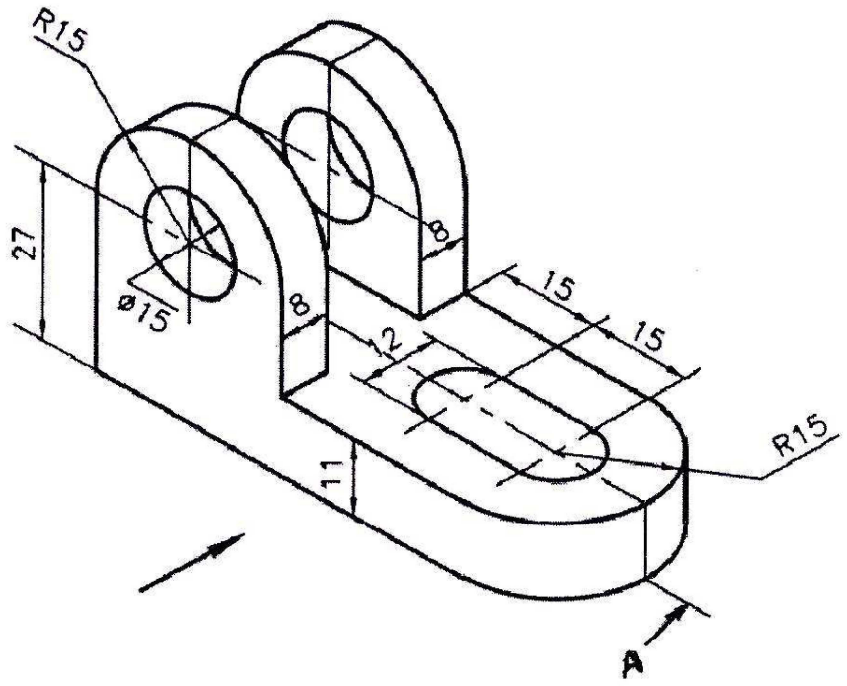

Fig. 2 C.I. Bracket

7. Fig. 3 shows the FV and LHSV of an object. Draw the isometric views using natural scale. [12]

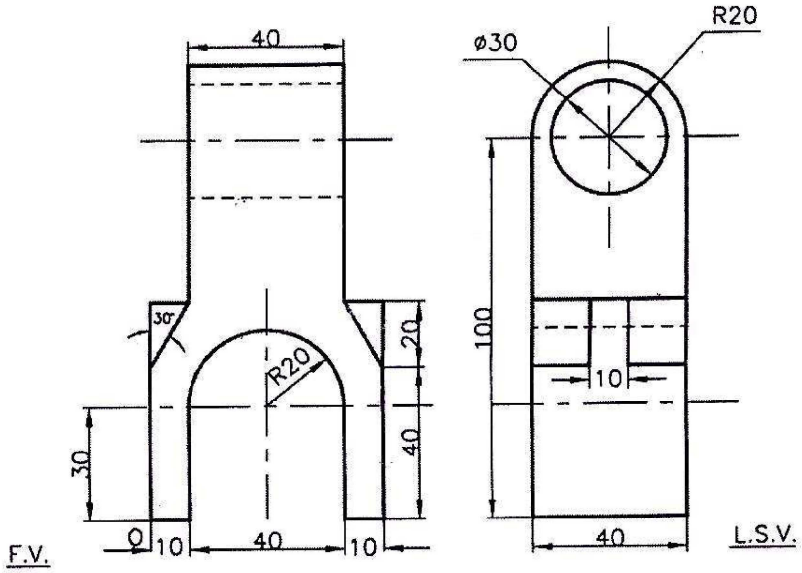

Fig. 3

Or

8. Fig. 4 shows the FV and RHSV of an object. Draw the isometric view using natural scale. [12]

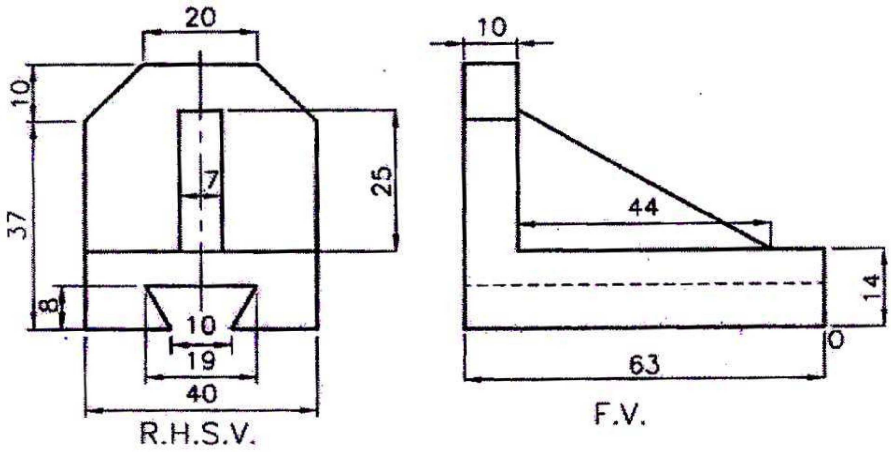

Fig. 4