

TED (10)–1017-A

Reg. No. ....

(REVISION—2010)

Signature .....

SECOND SEMESTER DIPLOMA EXAMINATION IN ENGINEERING/  
TECHNOLOGY—MARCH, 2013

ENGINEERING GRAPHICS

(Common except CP and CB)

[Time : 3 hours

(Maximum marks : 100)

[Note : Sketches accompanied.]

Marks

PART—A

(Maximum marks : 10)

- I Answer *all* questions in one or two sentences. Each question carries 2 marks.
1. With free hand sketches show any one method of dimensioning circle and radius as per BIS.
  2. What are the planes of projections in multiview projection ?
  3. What is the need of drawing auxiliary views in Engineering Drawing ?
  4. Write the different types of oblique projections.
  5. What are the types of sectional views used in Engineering drawing ?

(5x2=10)

PART—B

(Maximum marks : 50)

(Answer *any five* of the following question. Each question carries 10 marks)

- II Inscribe a regular pentagon inside the given circle of diameter 80 mm.
- III Draw the cycloid of a rolling circle of diameter 50 mm without slipping. Draw a tangent and a normal at any point on the cycloid.
- IV Draw the projection of the following points in same reference line :
- (a) Point A, in the VP and 28 mm below HP.
  - (b) Point B, in the HP and 30 mm in front of VP.
  - (c) Point C, in both HP and VP.
  - (d) Point D, is 20 mm above HP and 25 mm behind VP.
  - (e) Point E, is 18 mm below HP and 35 mm in front of VP.
- V A straight line PQ 60 mm long has its end P in VP and 15 mm above HP. It is inclined at  $30^\circ$  and  $40^\circ$  to HP and VP respectively. Draw its projections.

- VI Figure 1 shows isometric view of an object. Draw the following views and mark all dimensions :
- (a) Elevation looking from direction F.
  - (b) Auxiliary view of an inclined surface.
- VII Figure 2 shows the elevation of a funnel. Draw the complete development of the funnel.
- VIII Draw the oblique projection of the object shown in figure 3. Use cabinet method. Take the receding axis at  $45^\circ$  to the horizontal. (5x10=50)

## PART—C

(Maximum marks : 40)

(Answer any *two* of the following. Each question carries 20 marks.)

- IX Figure 4 shows isometric view of an object. Draw the following views and mark all dimensions :
- (a) Elevation from direction F.
  - (b) Left side view.
  - (c) Plan.
- X Orthographic view of a block is shown in figure 5. Draw its isometric view and mark all dimensions.
- XI The elevation and plan of a block is shown in figure 6. Draw its :
- (a) Sectional elevation (section through A-A)
  - (b) Side view looking from left side. (2x20=40)
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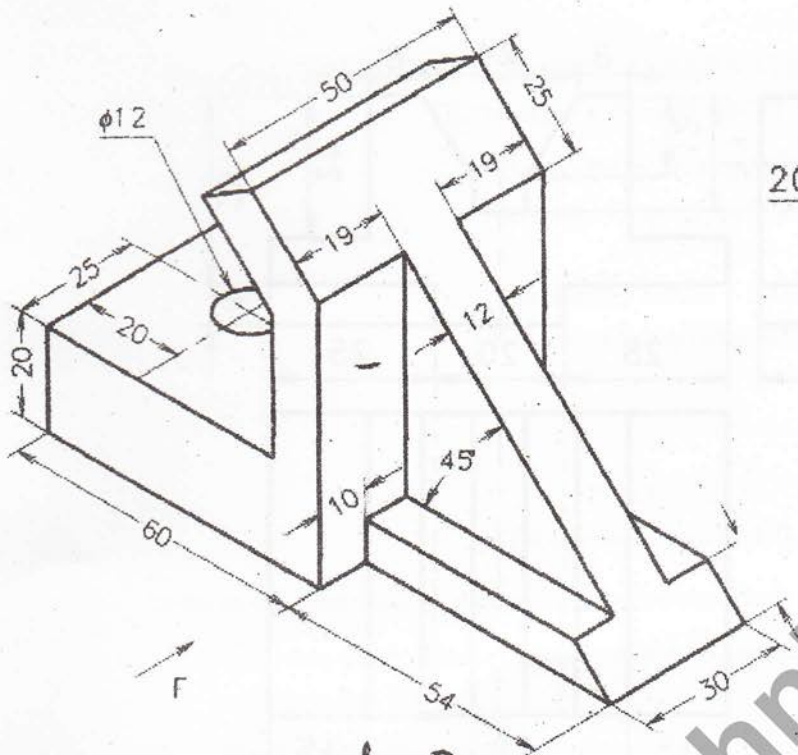


fig ①

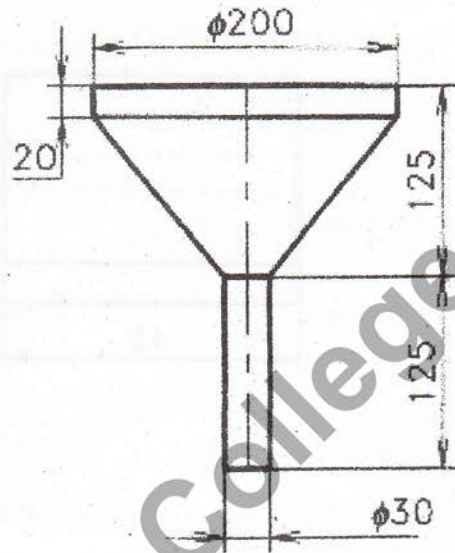


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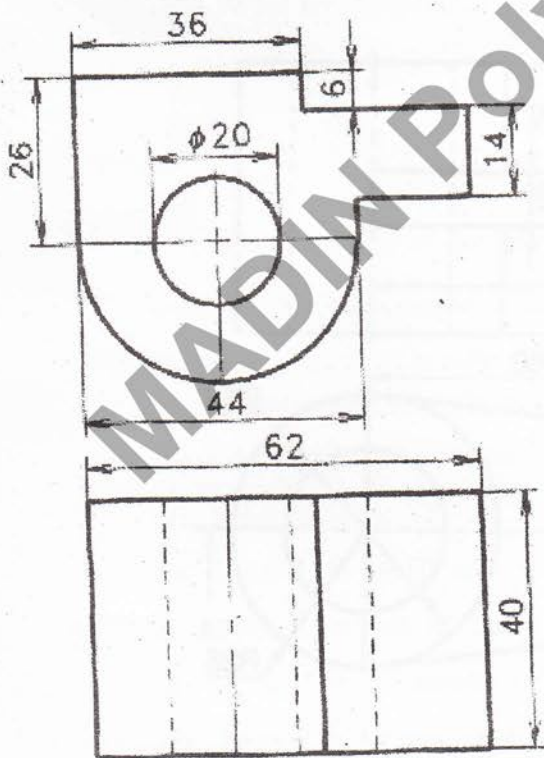


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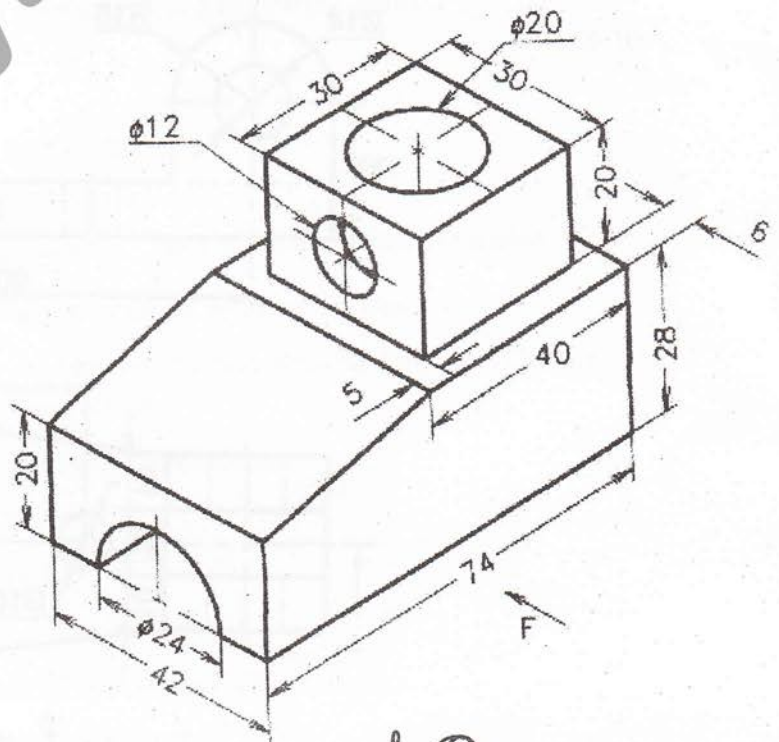


fig ④

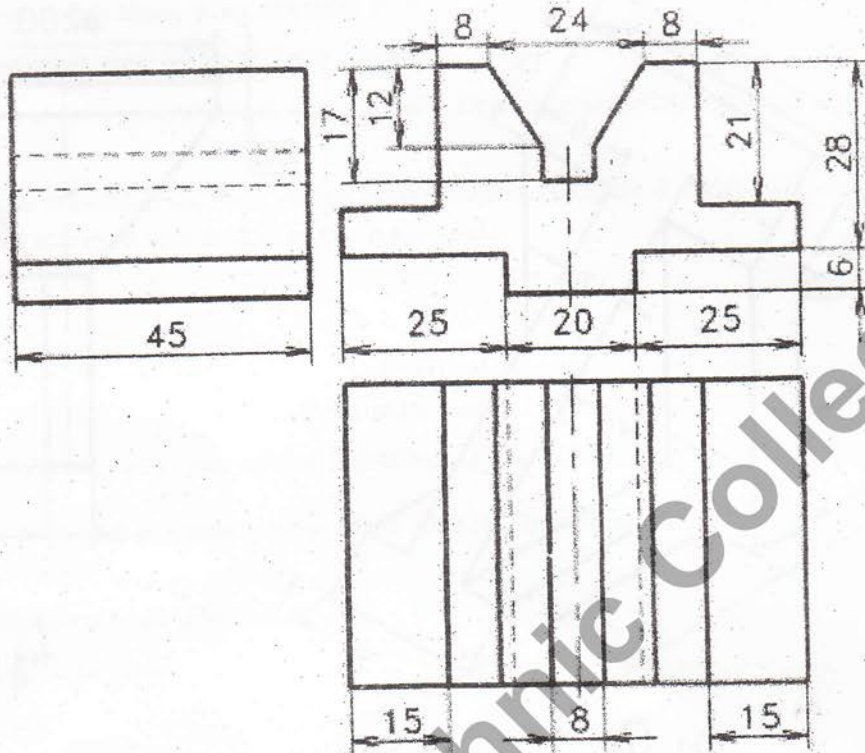


Fig (5)

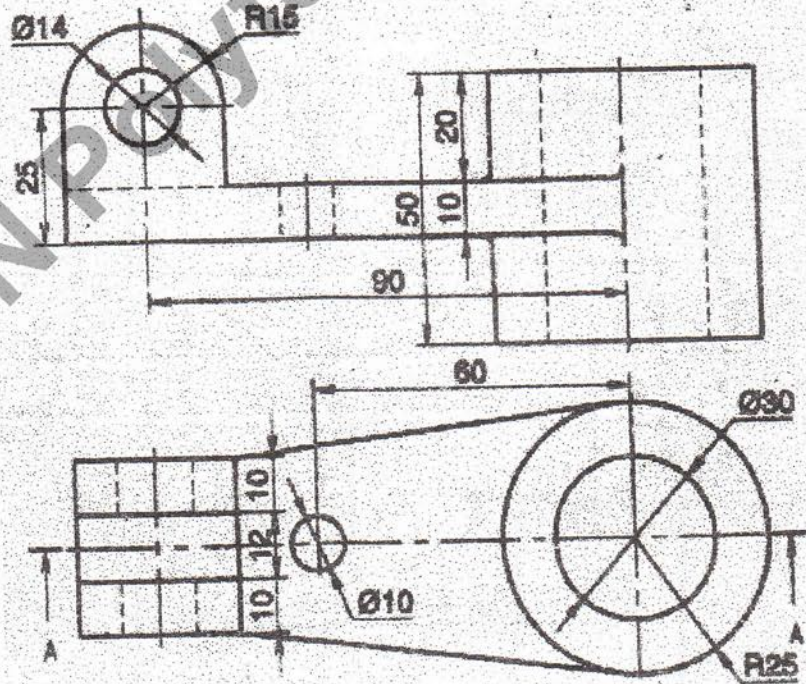


Fig (6)