

238414(38)

**Diploma in Engg. (Fourth Semester) Examination,
April-May 2018**

(Old Scheme)

(Metallurgy Branch)

METALLURGICAL ENGINEERING DRAWING

Time Allowed : Four hours

Maximum Marks : 100

Minimum Pass Marks : 35

Note : All questions are compulsory, unless mentioned otherwise.

1. (a) Write the general rules for dimensioning. 5
- (b) Describe in short with diagram : 5
 - (i) Dimension line

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[2]

- (ii) Extension line
- (iii) Arrow head
- (iv) Leader
- (v) Placing of dimension

2. Draw the following views of block as shown pictorially in fig (A) : 10
 - (a) Front view
 - (b) Top view
 - (c) Side view from right

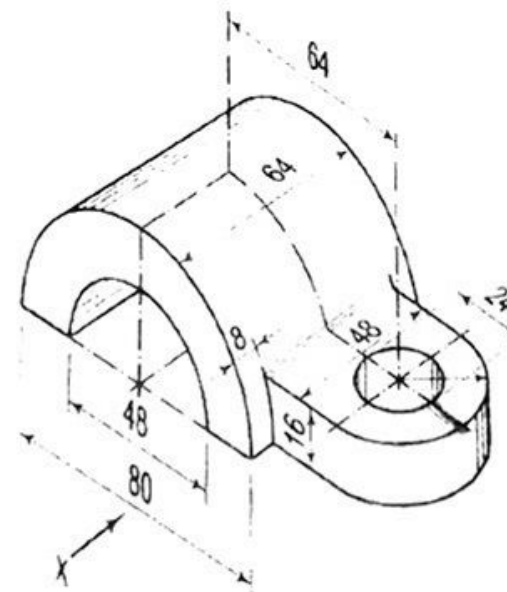


Figure (A)

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[3]

3. Develop the lateral surface of the truncated cylinder as shown in fig (B). The base diameter of cylinder is 50 mm and resting H.P. :

10

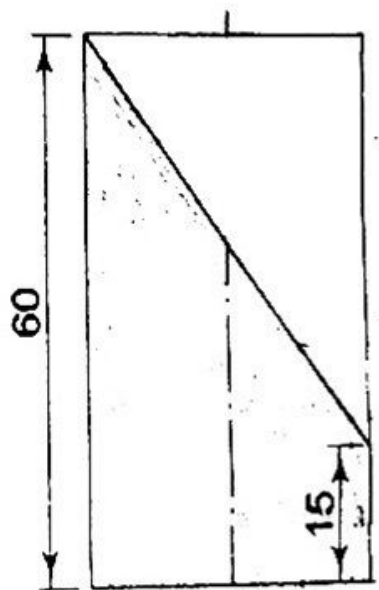


Figure (B)

4. Draw the isometric view of the object, two views of which are shown in fig (c) :

10

[4]

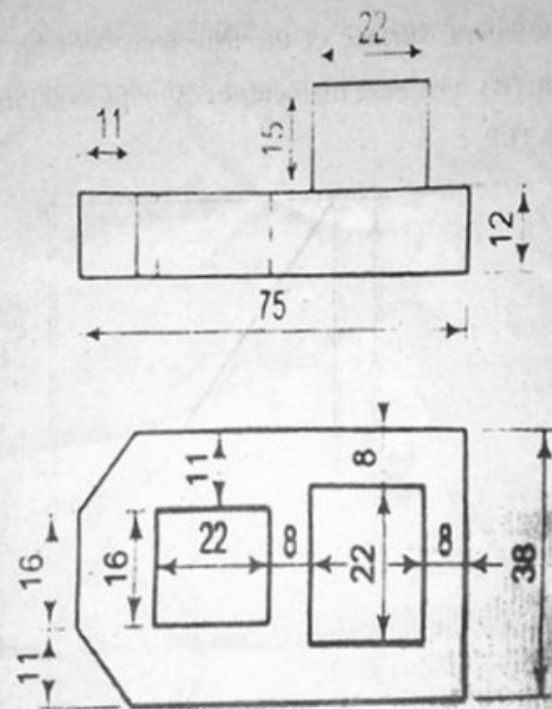


Figure (C)

5. Draw three views of a hexagonal headed bolt having 24 mm diameter and 100 mm long with a hexagonal nut. 10
6. (a) Draw the symbol of the following pipe fittings : 5
 (any five)
 (i) Cross
 (ii) Cap

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- (iii) Elbow 45° (flanged)
- (iv) Coupling
- (v) Union
- (vi) Reducer
- (vii) Check valve

(b) Draw the following welding symbols : (any five) 5

- (i) Fillet
- (ii) Square butt (plain)
- (iii) Double-V-butt
- (iv) Single level butt
- (v) Spot weld
- (vi) Seam weld
- (vii) Backing run

(c) Write differences between first and third angle projection. 5

1. Draw the views of a flanged coupling for connecting two shaft of diameter 60 mm. 15

(a) Write the advantages of computer aided drafting over manual drafting. 5

[6]

(b) List the input and output devices used in AUTO CAD system. 5

9. Fig. (D) show the pictorial view of an object. Draw it : 10

- (i) Front view in section of A-A
- (ii) Top view

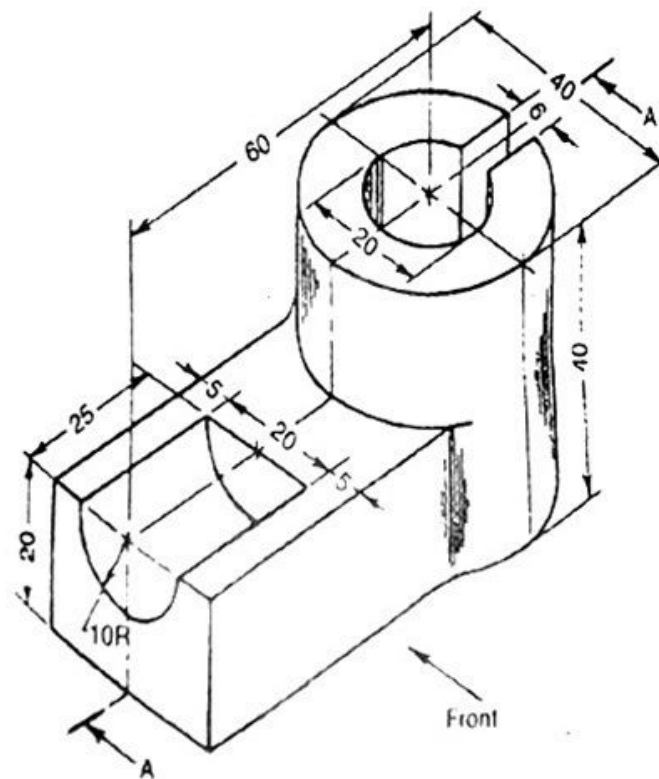


Figure (D)