

Roll No.

Total Printed Pages -4

F - 1608

**B.Voc. (Fourth Semester)
EXAMINATION, May-June, 2022
(New Course)
ENGINEERING DRAWING
(RETM - 407)**

Time : Three Hours]

[Maximum Marks:80

Note: Attempt any two questions from each unit. Each question carries equal marks.

Unit - I

1. A 3.2 on long line represent a length of 4m. Extend this scale to measure the length up to 25m. Show the length of 17m on this scale 10

OR

2. Construct a regular hexagon of 5m side by using any method as per your choice. Mention the steps of construction clearly. 10

P.T.O.

[2]

3. (A) Draw perpendicular bisector through a line of length 4cm.
(B) Construct angular bisector with the aid of compass by taking any angle, write the steps of construction.

10

Unit - II

1. A tetrahedron of 5cm long edges is resting on the H.P. on one of its faces, with an edge of the face parallel to V.P. draw its projections and measure the distance of its apex from the ground, all the four faces of tetrahedron are equilateral triangles of 5cm side. 10
2. A 80 mm long line PQ has end P 20 mm above H.P. and 40 mm in front of the V.P. The line is inclined at 30 degrees to the H.P. and is parallel to the V.P. Draw the projections of the line. 10
3. A circular plane of diameter 50mm is resting on a point of the circumference on the V.P. The plane is inclined at 30 degrees to the V.P. and the center is 35mm above the H.P. Draw its projections. 10

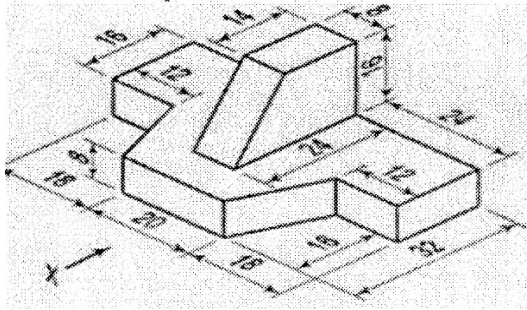
Unit - III

1. Briefly explain the difference between the first angle and third angle projection with its symbols used in engineering practice. 10

F - 1608

[3]

2. Draw the top view front view of the isometric projection given below. 10



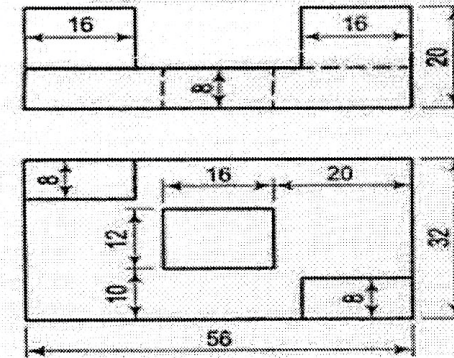
3. Define 10

- (A) Orthographic Projection
- (B) Plane of Projection
- (C) Reference Planes
- (D) Representative Fraction
- (E) Diagonal scale

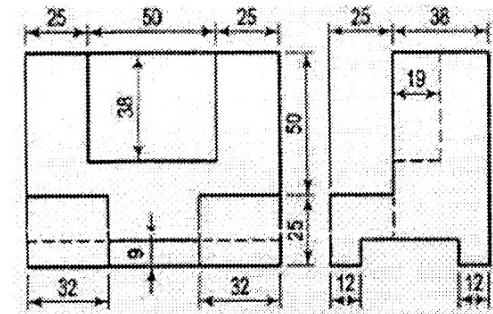
[4]

Unit - IV

1. Draw isometric view of the following figure given below. 10



2. Draw isometric view of the figure given below. 10



3. Define the following 10

- (A) Isometric ratio (derive the expression)
- (B) Isometric projection
- (C) Four center methods for drawing ellipse