

**Malla Reddy University**  
**School of Engineering – B. Tech**

**I Year I Semester Regular Examinations, February/March 2023**  
**Computer Aided Engineering Graphics and Workshop (MR22-1ES0104)**

Time: 2 hours

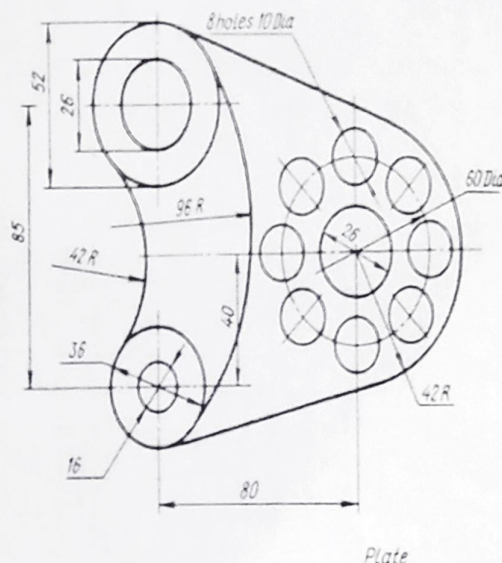
Max Marks: 40

**Note:** This question paper Consists of 5 Sections. Answer **FIVE** Questions, Choosing **ONE** Question from each **SECTION** and each Question carries 8 marks.

**SECTION-I**

- 1 Draw the given 2D Drawing by using AutoCAD commands.

[8 M]



OR

- 2 Draw a pentagon of side 30mm in a general method by horizontal & Vertical positions. [8 M]

**SECTION-II**

- 3 Draw the projections of the following points on a common reference line keeping the distance between their projections 30mm apart. [8 M]
- (a) Point A is 20mm below the HP and 50mm in front of the VP
  - (b) Point B is in the HP and 40mm behind the VP
  - (c) Point C is 30mm in front of the VP and in the HP
  - (d) Point D is 50mm above the HP and 30mm behind the VP

OR

- 4 The front view of a line AB 80mm long measures 55mm while its top view measures 70 mm. End A is in both HP and VP. Draw the projections of the line and find its inclinations with the reference planes. [8 M]

**SECTION-III**

- 5 Draw the projections of a regular pentagon of 40mm side having its surface inclined at  $30^\circ$  to V. P and side on which it rest on V.P. [8 M]

OR

- 6 Draw the projections of a cone with base 45 mm diameter and axis 60mm long when it is resting on the ground on a point of its base circle with the axis making an angle of  $30^{\circ}$  with HP. [8 M]

SECTION-IV

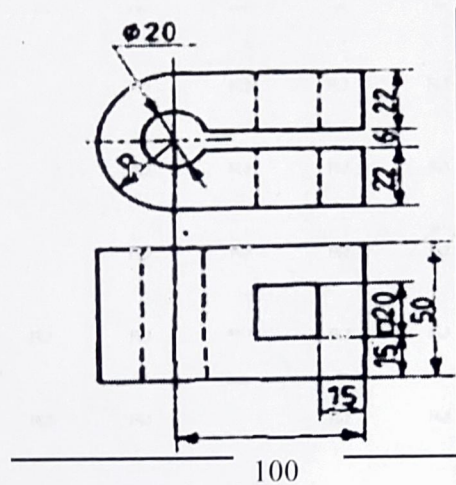
- 7 Draw the isometric projection of a frustum of hexagonal pyramid side of base 40mm and side of top face is 20mm and height 60mm. [8 M]

OR

- 8 A square pyramid of 2cm side and height 60mm, is placed centrally on the top of square prism of 60 mm side and height 40mm. Draw the isometric projection of the combination of solids. [8 M]

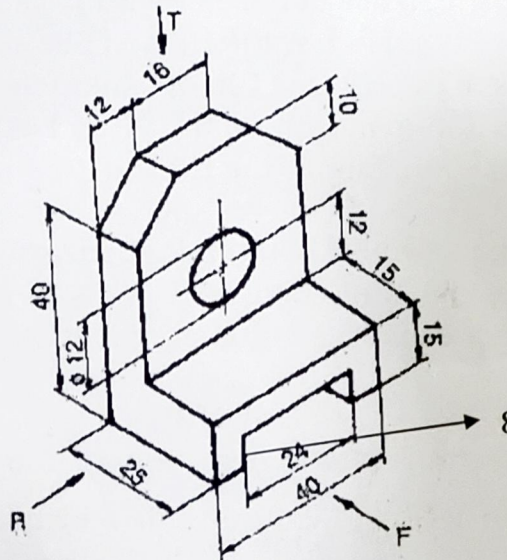
SECTION-V

- 9 Two views of a casting are shown in figure 2. Draw the isometric projection of the casting. All dimensions are in mm [8 M]



OR

- 10 Draw the front view, top view and side view of the object whose isometric view is shown in the Figure 2 below (All dimensions are in mm). [8 M]





**Malla Reddy University**  
**School of Engineering – B. Tech**  
**I Year I Semester Regular Examinations, February/March 2023**  
**Computer Aided Engineering Graphics and Workshop (MR22-1ES0104)**

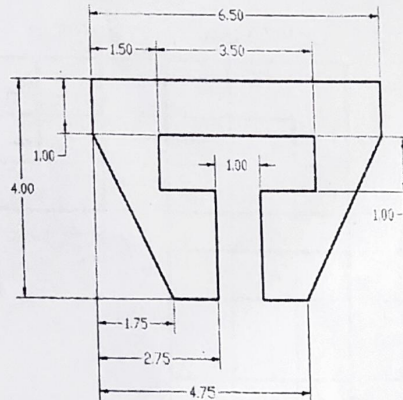
Time: 2 Hours 30 Minutes

Max Marks: 40

**Note:** This question paper Consists of 5 Sections. Answer **FIVE** Questions, Choosing ONE Question from each SECTION and each Question carries 8 marks.

**SECTION-I**

- 1 Draw the given 2D Diagram by using AutoCAD Commands

**[8 M]**

OR

- 2 Construct a regular pentagon and hexagon of side 30mm.

**[8 M]****SECTION-II**

- 3 Draw the projections of the following points on a common reference line keeping the distance between their projections 30mm apart.

**[8 M]**

- (a) Point A is 20mm above the HP and 50mm in front of the VP
- (b) Point B is in the VP and 40mm below the HP
- (c) Point C is 30mm in behind the VP and in the HP
- (d) Point D is 60mm below the HP and 30mm behind the VP

OR

- 4 A line AB 100mm long has its front view inclined at an angle of  $45^\circ$  to XY. The point A is in V.P. and 25mm above H.P. The length of the front view is 60 mm. Draw the top view of the line and measure its length. Also find the inclination of the line AB to H.P. and V.P.

**[8 M]****SECTION-III**

- 5 A circular plane of diameter 50mm is resting on a point of the circumference on the HP. The plane is inclined at  $30^\circ$  to the HP and its center is 35mm in front of the VP. Draw its projections.

**[8 M]**

OR

- 6 A pentagonal prism of base edge 30mm and axis 60mm rests on an edge of its base in the HP. Its axis is parallel to the VP and inclined at  $45^\circ$  to the HP. Draw its projections

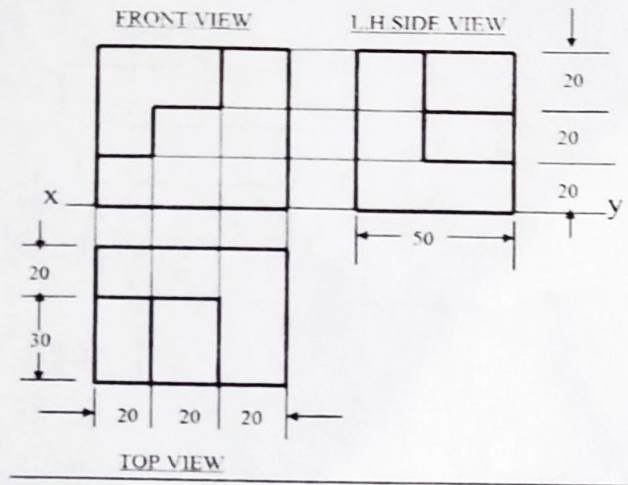
**[8 M]**

#### SECTION-IV

- 7 A cylinder of base diameter 30 mm, axis 60 mm is resting centrally on slab of 60 mm square and thickness 20 mm. Draw the isometric projection of the combination of the solids. [8 M]
- OR
- 8 Draw Isometric view of cylinder base circle diameter 50mm and height 60mm [8 M]  
 a) Vertical position  
 b) Horizontal position

#### SECTION-V

- 9 Draw the isometric view of the below figure. [8 M]



OR

- 10 Draw front view, top view and side view [8 M]

