

**B.M.S. College of Engineering, Bengaluru-560019**

Autonomous Institute Affiliated to VTU

**October / November 2021 Supplementary Examinations****Programme: B.E.****Branch : ALL****Course Code: 18ME1ESEED / 18ME2ESEED****Course Title: Elements of Engineering Drawing****Semester : I / II****Duration: 3 hrs.****Max Marks: 100****Date: 29.10.2021**

**Instructions:** 1. Answer any FIVE full questions, choosing one full question from each unit.  
2. Missing data, if any may be suitably assumed.

**UNIT - 1**

- 1 a) A point 35mm below XY line represents front view of two points E and F. The top view of point E is 25mm behind VP and the top view of point F is 40mm in front of VP. Draw the projections of points E and F and state the quadrants in which they lie. **05**
- b) A straight line AB 80 mm long has its end A 60 mm in front of VP and 15 mm above HP. Its left profile view is inclined to XY line at  $50^\circ$ . Point B is nearer to VP than point A. Draw the projections of the line AB and find its true inclinations with HP and VP. **15**

**OR**

- 2 a) A point is lying on HP, 25mm in front of VP and 15 mm behind RPP. Draw its projections & state the quadrant in which it is located. **05**
- b) A room is 6 m x 5 m x 3.5 m high. An object is placed 1.2 m above the ground and in the center of the room. Determine graphically its distance from one of the corners between the roof and the adjacent walls. Select a Scale 1:50 **15**

**UNIT - 2**

- 3 A rectangular cardboard ABCD of edges AB = 55 mm and BC = 70 mm is placed such that the diagonal AC makes  $60^\circ$  with HP and the side AB makes  $30^\circ$  with VP. Draw its projections **20**

**UNIT - 3**

- 4 A pentagonal pyramid of base 30mm sides and axis 65 mm long rests on HP on its base edge which is parallel to VP at a distance of 50 mm. Draw its projections when the slant triangular face bounded by that edge is inclined to HP and the apex of the pyramid is touching VP. **20**

**OR**

- 5 A square pyramid, 35 mm edges base and 72 mm axis length is suspended through the midpoint of its base edge such that the axis is inclined to VP at  $30^\circ$ . Draw its projections. **20**

#### UNIT - 4

- 6 Draw the development of the object shown in Fig (1). Height = 80 mm and base side = 30 mm

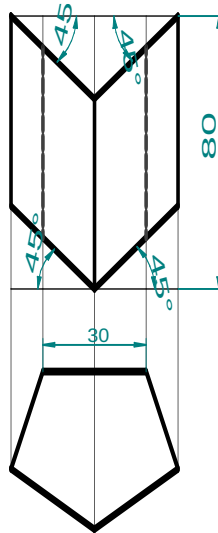


Fig (1)

#### UNIT - 5

- 7 Draw the isometric projection of combination of solids from the following data. A Hexagonal prism, 25 mm sides of base and axis length 60 mm is resting centrally on its base on the top face of a cylinder of base diameter 60mm and axis length 20 mm.

20

\*\*\*\*\*