KUMARAGURU
college of technology
character is life

B.E/B.TECH DEGREE EXAMINATIONS: JUNE 2015

(Regulation 2013)

First Semester

U13MET101: ENGINEERING GRAPHICS

(Common to all branches)

Time: Three Hours   **Maximum Marks: 100**

Answer all the Questions:-

PART A (5 x 20 = 100 Marks)

Q.No. 1 is Compulsory

1. A line AB has its end A20 mm above HP and 25mm in front of VP. The other end B is 45mm above HP and 55mm in front of VP. The distance between the end projections is 60mm. Draw its projections. Also find the true length and true inclinations of the line with HP & VP.

2. a) A pentagonal pyramid of base edge 25 mm and axis length 60 mm rests on one base side on HP such that the highest base corner is 20 mm above HP. Its axis is parallel to the VP. Draw its top and front views.

    (OR)

    b) A circular lamina of diameter 70mm has the end E of the diameter EF in the HP and the end F in the VP. Draw its top and front views when its surface is inclined at 50° to the HP and 40° to the VP

3. a) A cylinder of base diameter 50 mm and axis length 70mm is resting on HP on its base. A cylindrical hole of 40mm diameter is drilled on

the surface of the cylinder. The axis of the hole intersects with the axis of the cylinder at right angles and bisects the axis of this cylinder. Draw the development of the lateral surface of the cylinder.

(OR)

b) A hexagonal pyramid side of base 30 mm and altitude 70 mm rests with its base on HP and with a side of base parallel to VP. It is cut by a cutting plane inclined at 35° to HP and perpendicular to VP and is bisecting the axis. Draw the sectional plan of the pyramid and the true shape of the section.

4. a) A cone, base 50 mm diameter and axis 70 mm long, stands on HP. A section plane cuts it perpendicular to VP, inclined at 45° to HP and passing through a point on the axis 35 mm above the base. Draw the isometric projection of the truncated cone, showing the cut surface

(OR)

b) A square pyramid of base edge 25 mm and 50 mm axis, rests on the ground a with its base edges equally inclined to PP. The station point is 50 mm above the ground, a 45 mm in front of PP and 10 mm to the left of nearest corner. Draw the perspective projection of the solid.

5. a) Sketch free hand orthographic views for the given isometric view in Fig No 1

(i)
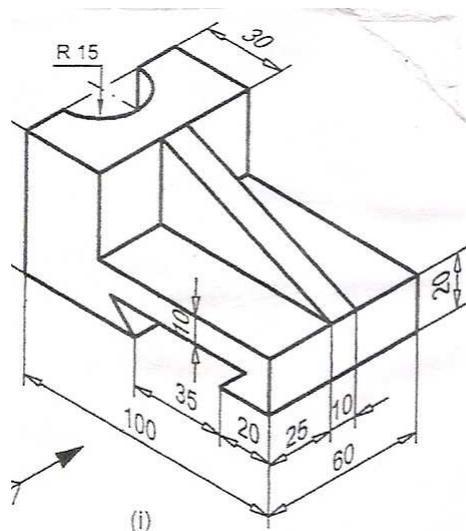
(OR)

b)   Sketch free hand pictorial views for the given orthographic view in Fig No 2

FRONT VIEW   L.S. VIEW

TOP VIEW

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