Reg. No. :

## **Question Paper Code: 11007**

B.E./B.Tech. DEGREE EXAMINATION, OCTOBER 2014.

First Semester

Computer Science and Engineering

## 01UME107 – ENGINEERING GRAPHICS

(Common to ALL branches)

(Regulation 2013)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions.

(5 x 20 = 100 Marks)

1. (a) Draw the plan, elevation and left side view of the following object. All dimensions are in mm.



Or

(b) Draw the plan, elevation and left side view of the following object. All dimensions are in mm.



2. (a) One end A of a line AB, 80 mm long is 30 mm in front of V.P. and 20 mm above H.P. The line is inclined at 30° to the HP and 45° to the VP. Draw the projections of the line. (20)

## Or

- (b) A  $60^{\circ}$  set square has its shortest edge length 40 mm kept perpendicular to the VP so that the projection of the set-square on the HP is an isosceles triangle. Draw the projections and find the inclination of the set-square with the HP. (20)
- 3. (a) A right circular cone of diameter 60 mm and height 70 mm is resting on the ground on one of the point on the circumference of its base with the axis parallel to the VP. Draw the projections of the cone if the end generator is perpendicular to HP.
  (20)

## Or

- (b) A hexagonal pyramid of base side 30 mm and axis length 60 mm is resting on V.P. one of its base edges with the face containing the resting edges perpendicular to both H.P. and V.P. Draw its projections. (20)
- 4. (a) A Cylinder of base diameter 50 mm and height 70 mm is resting on its base on H.P. It is cut by a plane inclined at 30° to H.P and meets the axis 35 mm from the top. Draw the isometric view of the truncated cylinder. (20)

Or

(b) A hexagonal pyramid of base side 25 mm and height 60 mm rests on the HP on its base with two of its base edges are perpendicular to the VP. It is cut by a plane perpendicular to the VP and inclined at 45° to the HP at a distance of 20 mm from the vertex on the axis. Draw the development of the lateral surfaces of the pyramid.

(20)

(a) A dust bin is in the form of a hollow square pyramid with the base dimensions of 20 mm side and the top open surface of 45 mm side. Draw the isometric projection of the hollow dust bin, if its height is 50 mm and the wall thickness is negligible.

11007

(b) A Cylinder of base diameter 50 mm and height 70 mm is resting on its base on H.P. It is cut by a plane inclined at 30° to H.P and meets the axis 35 mm from the top. Draw the isometric view of the truncated cylinder. (20)