H.T.No. | | | | | | | | | | |

Code No: ME1507 **GEC-R14**

I B. Tech II Semester Supplementary Examinations, December 2017

ENGINEERING GRAPHICS - II

(Mechanical Engineering)

Time: 3 Hours **Max. Marks: 60**

Note: Answer Any **Five** Questions. All Questions Carry Equal Marks.

5 × 12 = 60M

1. A cone of base diameter 50 mm and axis 60 mm has one of its generators in the V.P. and inclined at 30^0 to the H.P. Draw its projections when the apex is 15 mm above the H.P.

2. A cube of 50 mm long edge lies on one of its faces on the H.P. It is cut by an A.I.P. producing a largest rhombus. Draw the projections, true shape of the section and determine the inclination of the section plane with the H.P.

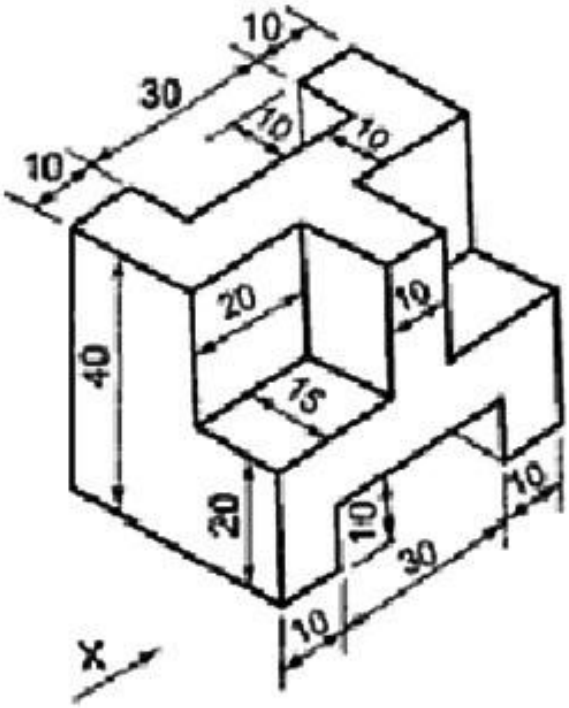
3. A square pyramid of base side 40 mm and axis 60 mm is resting on its base on the H.P. such that all the sides of the base are equally inclined to the V.P. It is cut by a section plane perpendicular to the V.P. and inclined at 45^0 to the H.P. bisecting the axis. Draw the development of its lateral surface.

4. A right circular cone of base 80 mm and axis 100 mm, is resting on its base on the H.P. It is completely penetrated by a cylinder of base 40 mm diameter. The axes of the solids intersect each other at right angles, 30 mm above the base of the cone. Draw the projections of the combination and show curves of intersection.

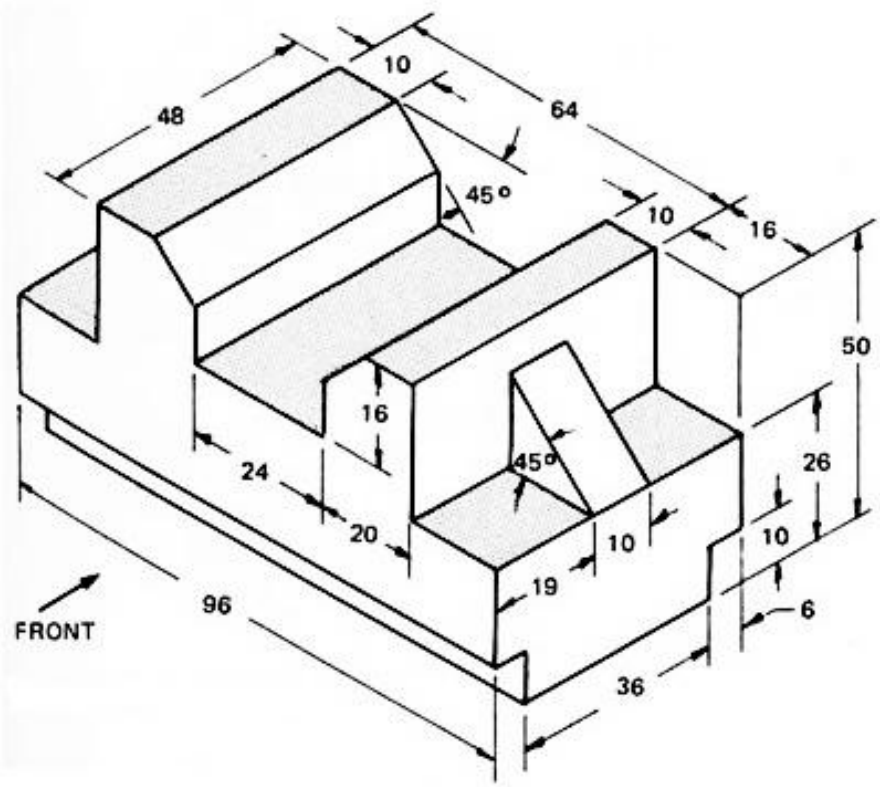
5. A horizontal cylinder of diameter 30 mm and axis 65 mm long penetrates into a vertical cylinder of diameter 55 mm and axis 75 mm long. The axes of the cylinders are offset by 5 mm. Draw the curves of intersection when the axis of the horizontal cylinder is parallel to the V.P.

6. A cube of 60 mm side has through holes of square shape of 30 mm side, cut at the centre of all the six faces. The sides of the square holes are parallel to the edges of the cube. Draw the isometric view of the cube.

7. Draw the front view, top view and left side views of a block as shown in figure.



8. Draw the front view, top view and two side views of the solid shown in figure.



* * * * *