COLLEGE OF ENGINEERING, PUNE

(An autonomous institute of Govt. of Maharashtra)

End Semester Examination

ENGINEERING GRAPHICS II **(D)**

Programme: F.Y.B.TECH (ME 103)

Date: 02 / 05 /2010

Time: 3 hours **Marks 50**

Instructions:

1) All questions are compulsory.
2) Figures to the right indicate full marks.
3) Assume suitable data whenever necessary.
4) Retain all the construction lines and external constructions.
5) Dimensioning, line work and symbols carry due credits.

Q No 1 Draw the free hand sketches of the following (Marks 12)
(i) Capstan Nut (Two views) (ii) Eye Foundation Bolt (iii) Muff coupling (Two views) (iv) Knuckle Joint (Two views)

or

Q No 1 A vertical cylinder of 60 mm diameter is penetrated by a horizontal square prism, base 40 mm side the axis of which is parallel to the V.P.and 10mm away from the axis of the cylinder. A face of the prism makes an angle of 30 degrees with the H.P.Draw their projections , showing curves of intersection.

or

Q No 1 Fig .shows development of a square pyramid with three curves drawn in it . Draw plan and elevation of square pyramid with all sides of base equally inclined to V.P. keeping 'OX' nearer to observer. Show all the curves in plan and elevation

1/5D

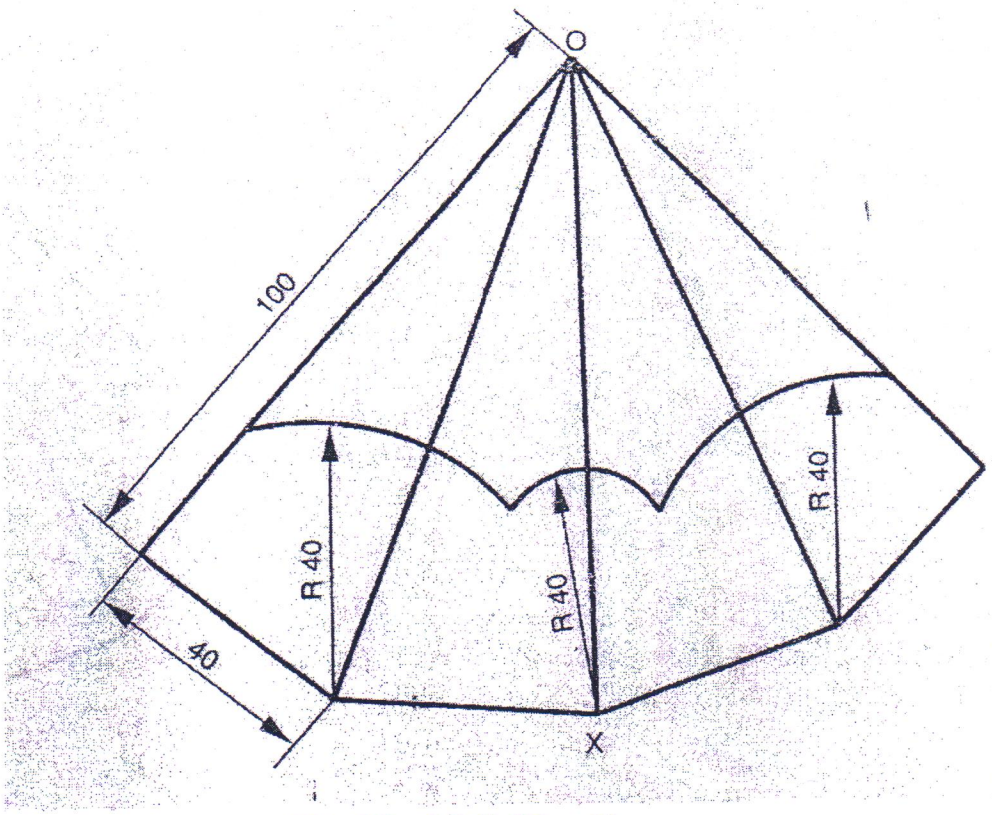

Fig No 1(Q No. 1)

Q No 2 Draw the isometric view of the following arrangement (Marks 12)
A cylinder rests on top of the frustrum of hexagonal pyramid. A hemisphere is centrally kept on the cylinder
Hexagonal pyramid –Bottom base side 30 mm
Top base 20 mm
Axis of the frustrum of the hexagonal pyramid – 40 mm
Cylinder –Base diameter 30 mm
Axis of the cylinder 20 mm
Hemisphere – Radius of the sphere – 20 mm

2/5D

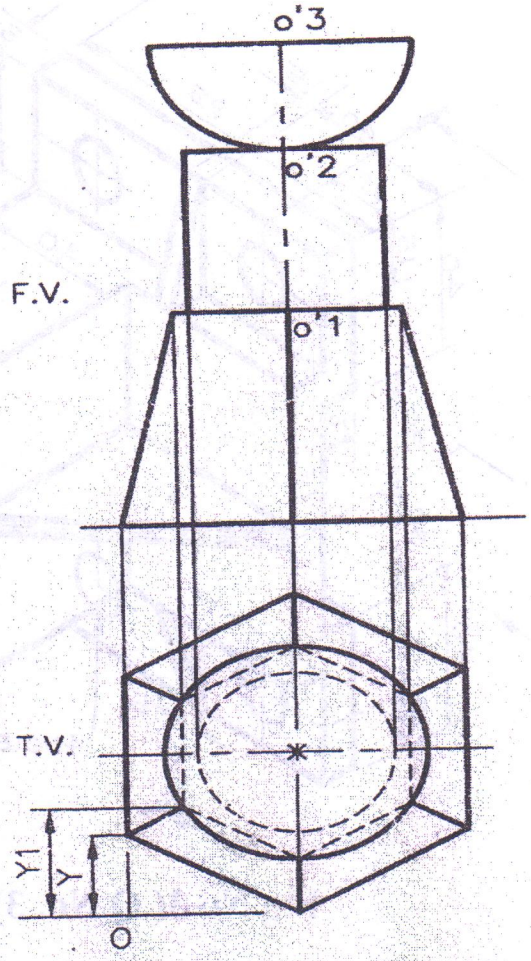

Fig No 2(Q No. 2)

Q No 3: A pictorial view of a machine part is shown in figure. Draw to scale full size the following views (i) Front view looking along the direction of arrow X (ii) Sectional Left Hand Side View (iii)Top View Use First Angle Method of Projection only (Marks - 13)

3/5D

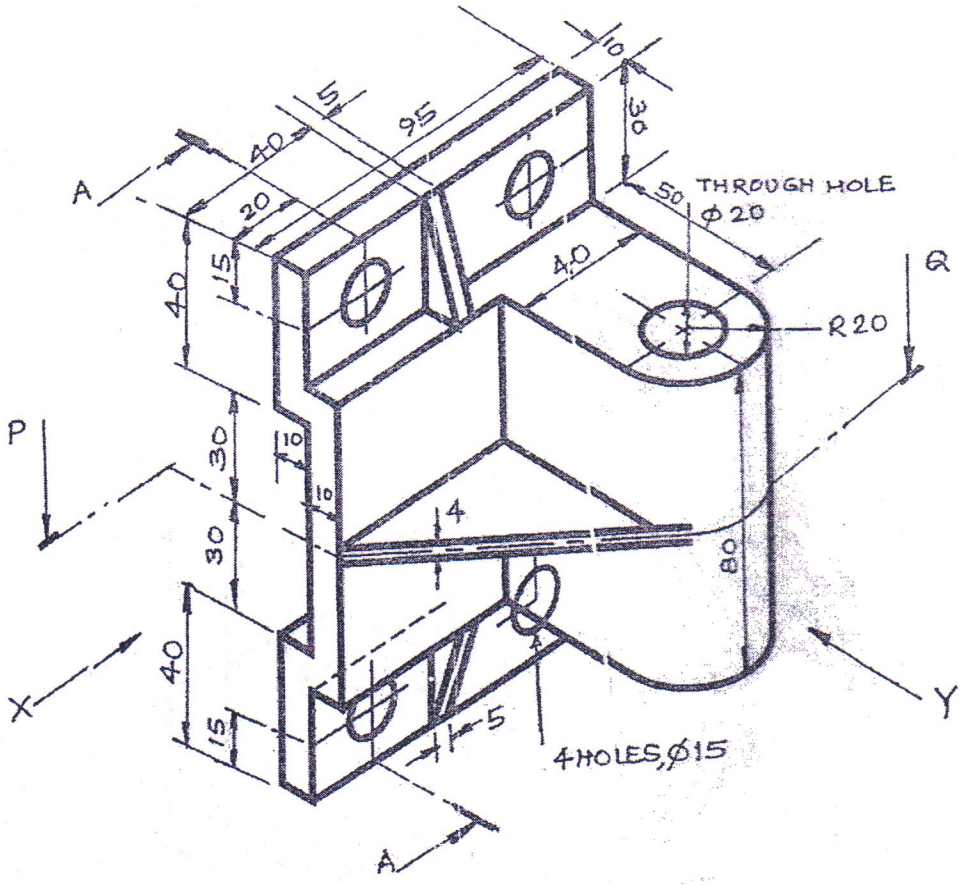

Fig No 3(Q No. 3)

Q No 4 Figure shows the top view and front view of an angle shaft bracket. Draw the sectional front view (section along BB) Top view and Left Hand Side View (Marks-13)

4/5D

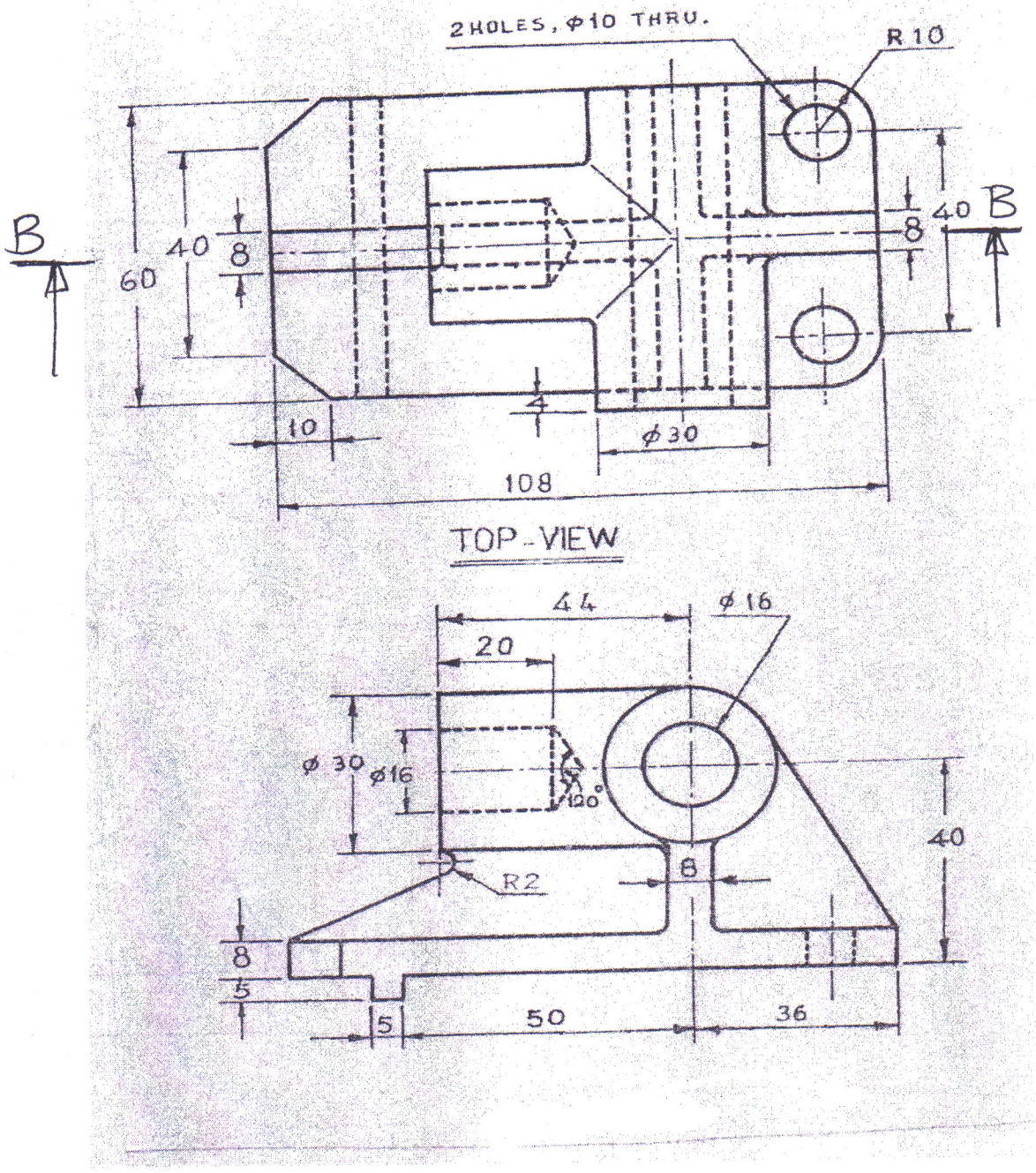

Fig No 4(Q No. 4)

5/5D