

FACULTY OF ENGINEERING
F.E(All)Year Examination –MAY-2015
Engineering Graphics
(Revised)

[Time: Four Hours]

[Max. Marks: 80]

“Please check whether you have got the right question paper.”

- N.B**
- i) Solve any three questions from each section.
 - ii) Assume suitable additional data if required and state the same clearly.
 - iii) Fig. shown to the right hand margin indicates full marks.

SECTION A

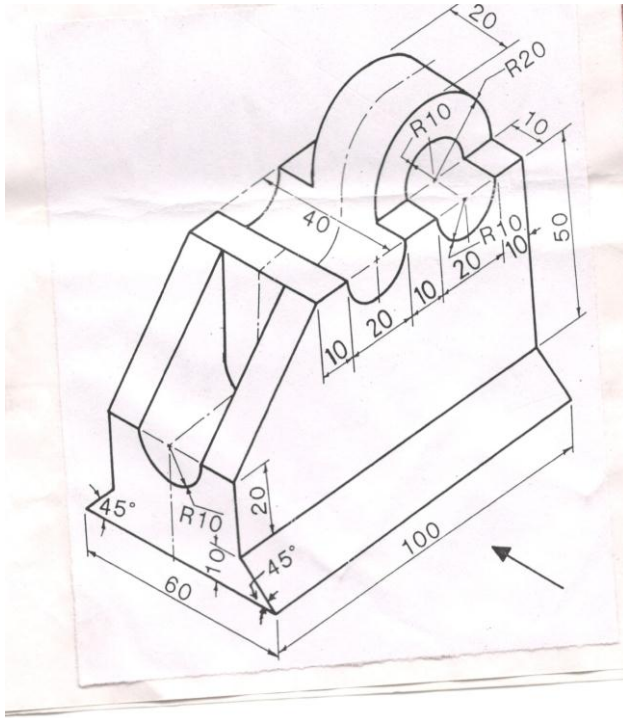
- Q.1 A line AB, 90mm long is inclined at 45° to the H.P and its top view makes an angle of 60° with the V.P. The end ‘A’ is in the H.P and 12mm in front of V.P Draw its front view and find its true inclination with V.P 13
- Q.2 Elevation of straight line PQ measured 60mm and makes an angle of 30° with xy line. The end point ‘P’ of the line is in the H.P and in front of V.P. The V.T of the line is 10mm below xy line and makes an angle of 45° with V.P. Draw the projections. Find its H.T and inclination with H.P 13
- Q.3 A regular pentagon PQRST of 40mm sides has its side PQ in the V.P and inclined at an angle of 30° to HP. The corner ‘P’ is 20mm above H.P and corner ‘S’ is 25mm in front of V.P. Draw projections of the plane and find its inclination with V.P 13
- Q.4 A hexagonal prism, edge of base 30mm and height 50mm has a hole of 38mm drilled centrally through its end faces (along the axis). Draw its projections when it is resting on one of its base corners on H.P with its axis inclined at 60° to the H.P and two of its rectangular faces parallel to the V.P 14
- Q.5 A cone of base diameter 65mm and axis 75mm long is resting on its base on H.P. it is cut by an A.I.P, so that true shape of the section is an isosceles triangle having 50mm base. Draw plan, elevation and true shape of section 13

SECTION B

- Q.6 A right circular cone of 55mm diameter and 80mm height rests on ground plane on its base. A bee starts from a point on the base rim on right hand side and moves around the surface of the cone and finally comes back to the starting point. Draw its front view sectional top view & true shape of section 13

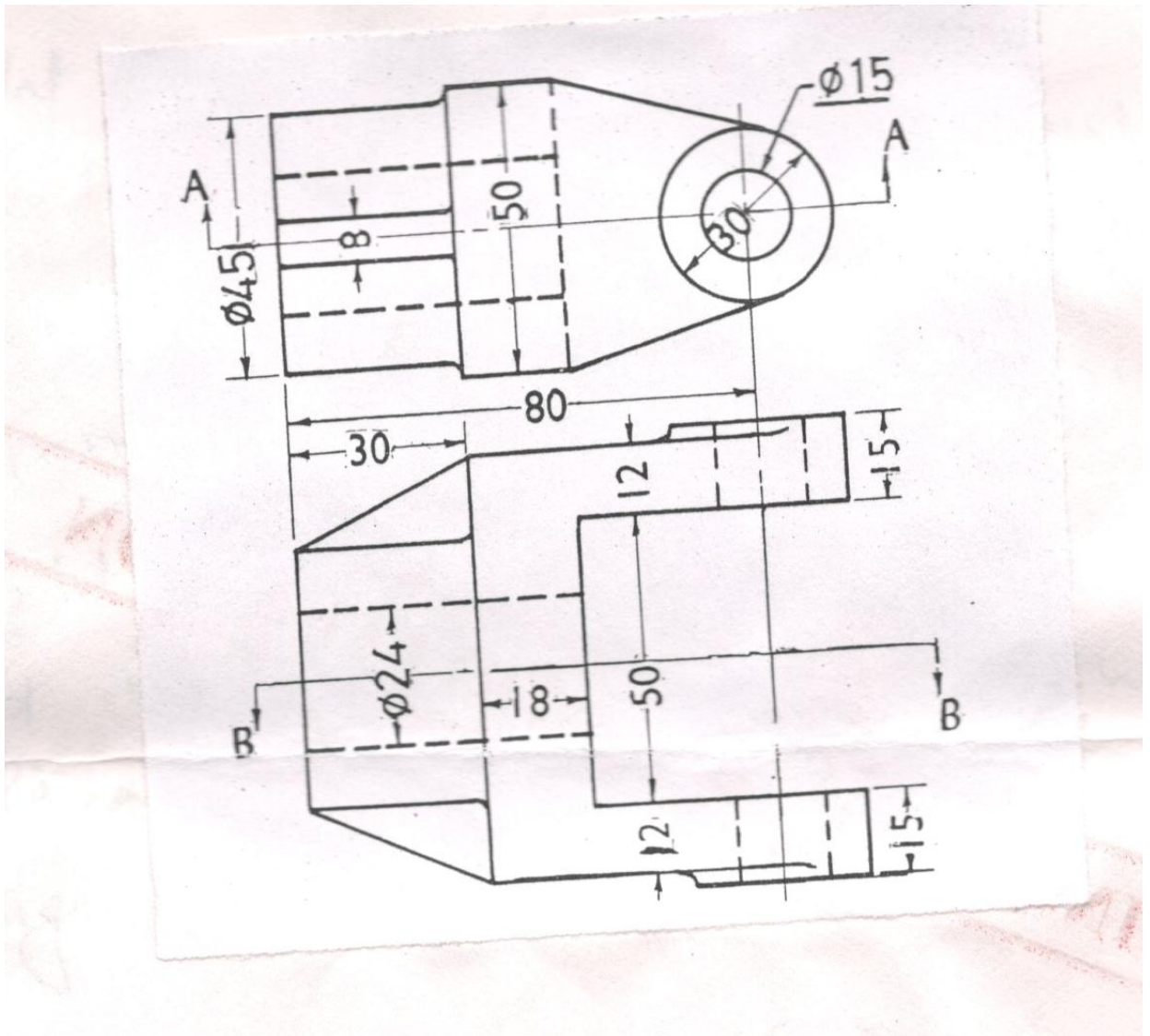
Q.7

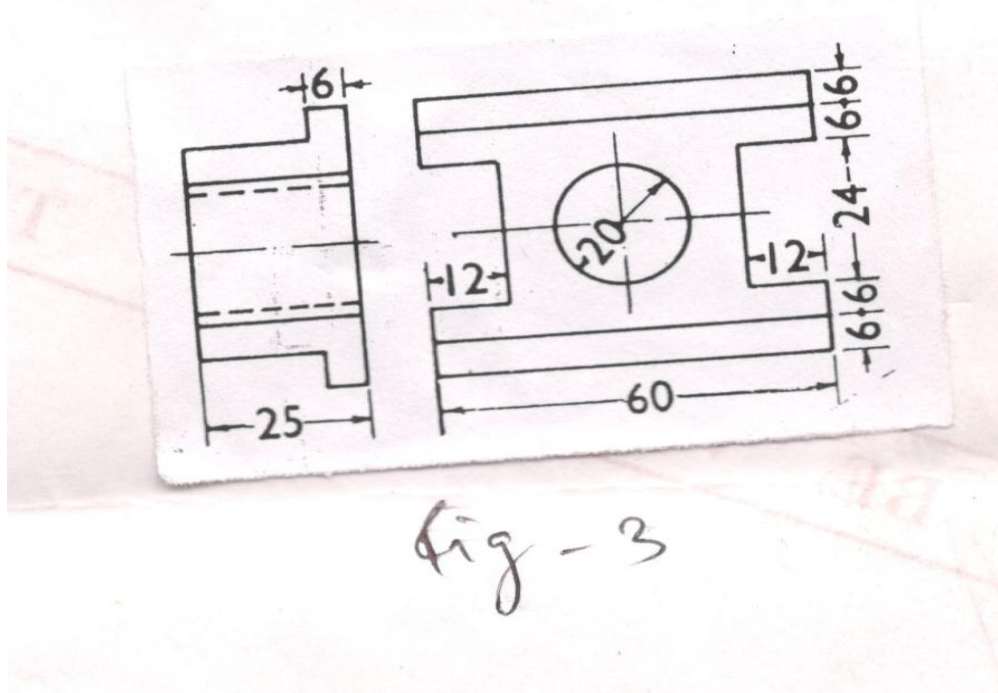
Fig.1 shows isometric view of an object. Draw front view, Top view and left hand side view 14



Q.8

Two views of an object are shown in fig.2. Draw 1) sectional Top view along section – A- A 2) front view 3) side view from left 13





Draw free hand sketches of the followings (any three)

- 1) Buttress thread
- 2) castle nut
- 3) Eye foundation bolt
- 4) various symbols for forms of welding joints
- 5) double riveted lap joint