DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Supplementary Examination – December - 2018

Course: B. Tech **Sem.: I**

Subject with Subject Code: Engineering Graphics (ME104/204) **Marks: 60**

Date: 08/12/2018 **Time: 4 Hrs**

Instructions to the Students

1. Each question carries 12 marks.
2. Attempt **any five** questions of the following.
3. Illustrate your answers with neat sketches, diagram etc., wherever necessary.
4. If some part or parameter is noticed to be missing, you may appropriately assume it and should mention it clearly

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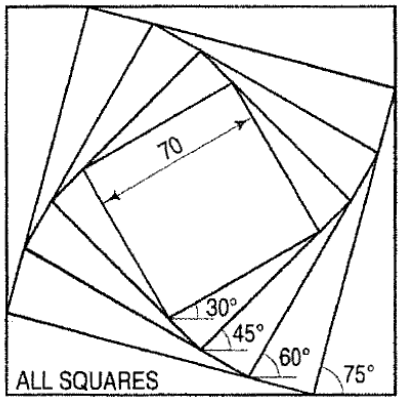
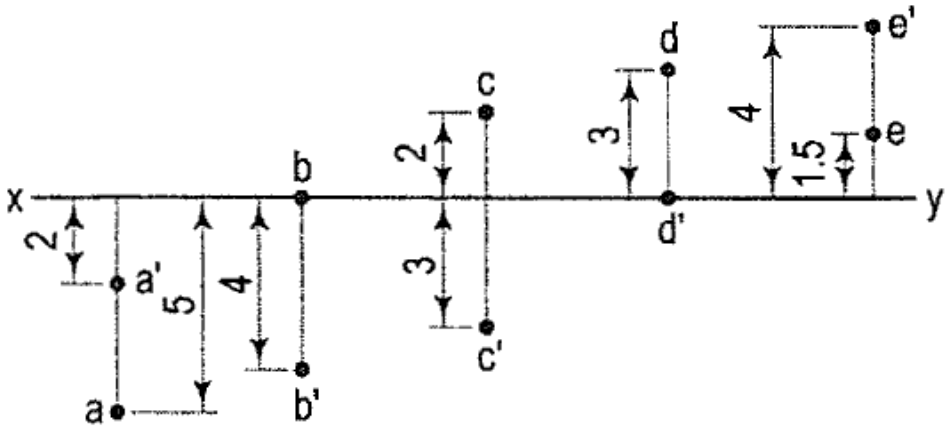
(Marks)

Q.1. a) Redraw the following figure (dimension is given in mm). (6)



b) What are the two systems of placing dimensions on a drawing? Illustrate your answer with sketches. (6)

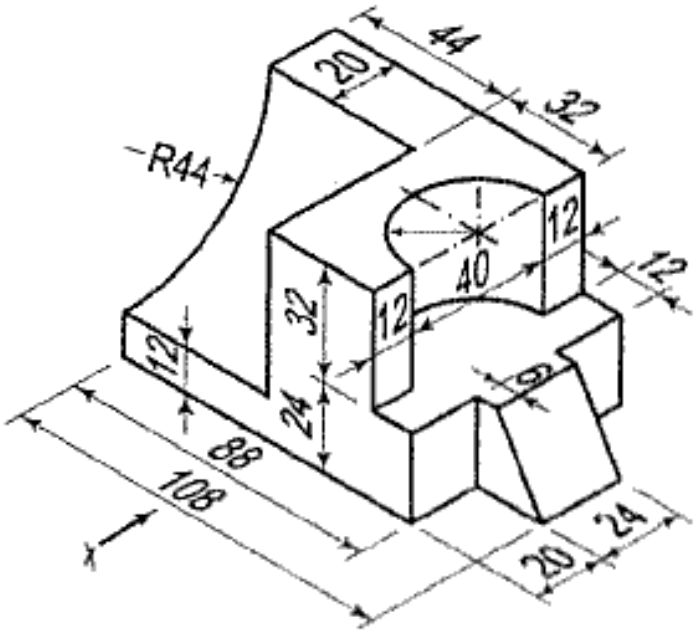
Q.2. a) Projections of various points are given in following figure. State the position of any four points with respect to the planes of projection, giving the distances in centimetres. (4)



b) Draw the following views of the object shown in the following figure in the X direction.

i) Front view (4)

ii) Top view (4)



Q.3. a) The top view of 75 mm long line AB measures 65 mm, while the length of its front view is 50 mm. Its one end A is in the H.P. and 12 mm in front of the V.P. Draw the projections of AB and determine its inclinations with the H.P. and the V.P. (6)

b) Draw the projections of a circle of 50 mm diameter having its plane vertical and inclined at 30° to the V.P. Its centre is 30 mm above the H.P. and 20 mm in front of the V.P. (6)

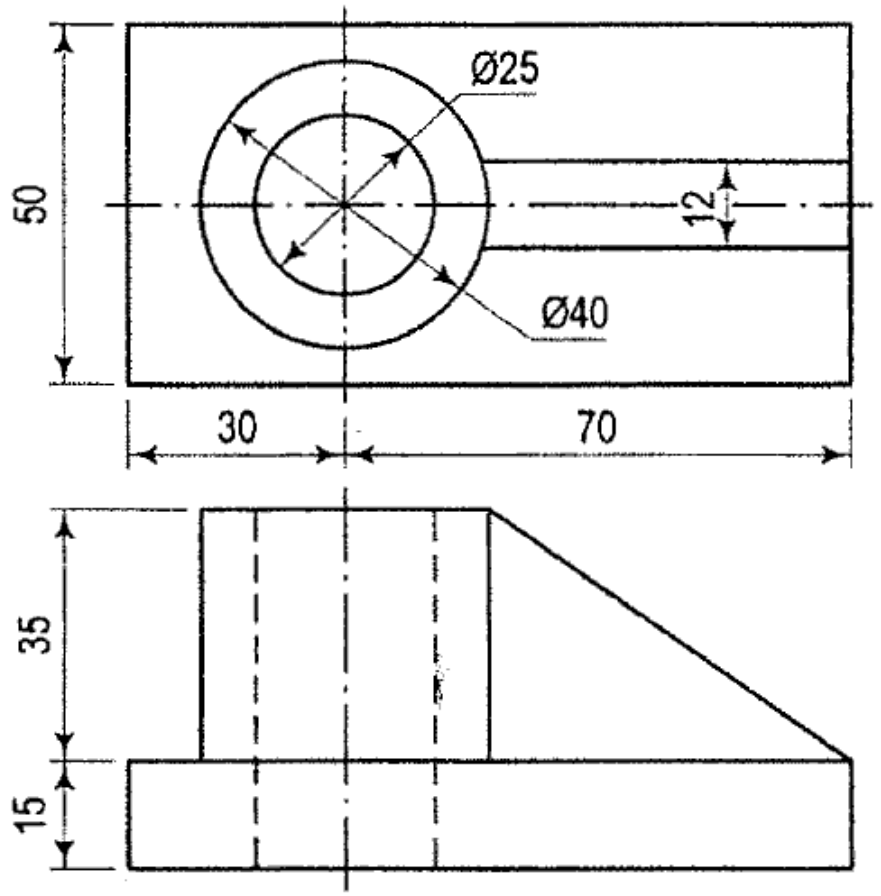
Q.4. Draw the projections of a pentagonal prism, base 25 mm side, and axis 50 mm long, resting on one of its rectangular faces on the H.P. with the axis inclined at 45^0 to the V.P. (12)

Q.5. Solve **<u>any one</u>** of the following questions (12)

A hexagonal pyramid, base 30 mm side, and axis 70 mm long is resting on its slant edge of the face on the horizontal plane. A section plane, perpendicular to the V.P., inclined to the H.P. passes through the highest corner of the base and intersecting the axis at 25 mm from the base. Draw the projections of the solid and determine the inclination of the section plane with the H.P.

OR

Following figure shows Front View (FV) and Top View (TV) of an object by third angle projection method. Draw its isometric view.



Q.6. Draw the development of the lateral surface of the part P of the hexagonal pyramid shown in fig. (12)