DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE – RAIGAD -402 103

End Semester Examination – May 2019

Course: B. Tech (All) **Semester: I/II**

Subject: Engineering Graphics (EG1203)

Date: 23/05/2019 **Marks:** 60 **Time:** 4 Hrs.

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Instructions to the Students

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

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(Marks)

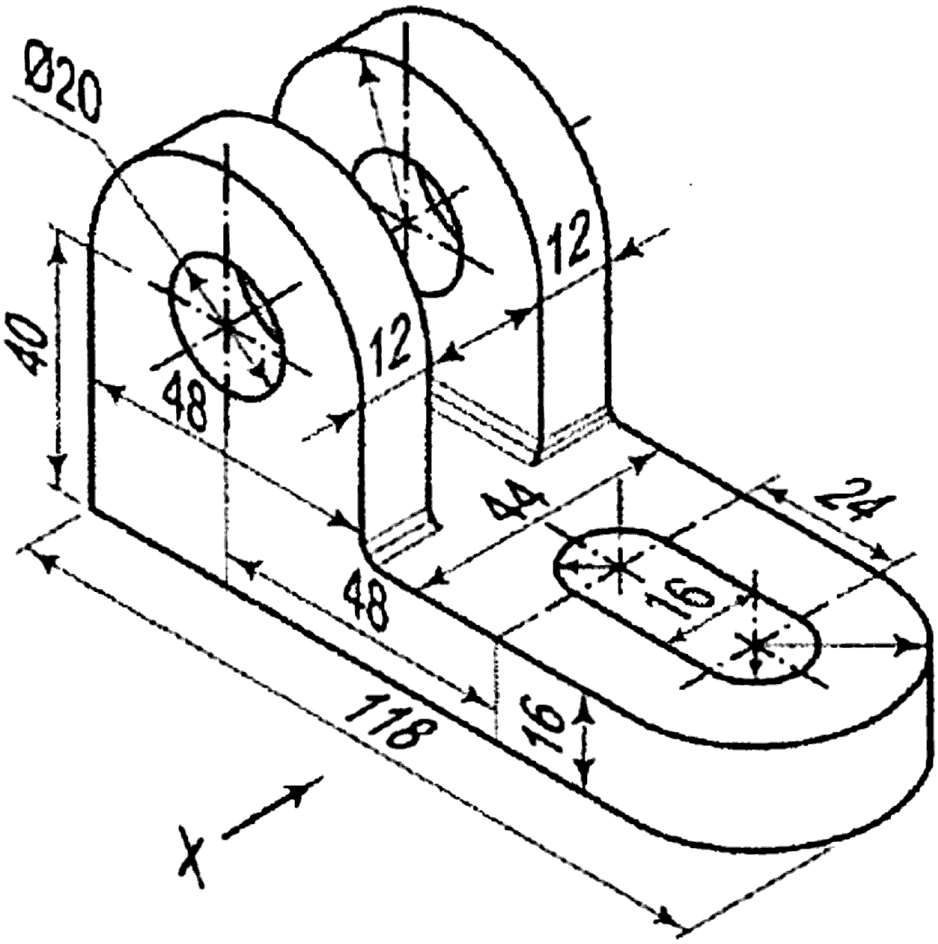
Q.1 a) Draw the following types of lines according to drawing standard SP 46. **(6)**

1. Cutting plane line
2. Centre line
3. Hidden line
4. Dimension line
5. Extension line
6. Outline

b) Draw a regular hexagon of 30 mm side by any method and draw also a circle touching each corner of the hexagon. **(6)**

Q.2 Draw the following views of the object (in X – direction) shown below, by using first angle projection method.

a) Front View (4)
b) Top View (4)
c) Right Hand Side View (4)



Q.3. Draw the projections of a regular hexagon of 25 mm side, having one of its sides in the H.P. and inclined at 60° to the V.P., and its surface making an angle of 45° with the H.P**. (12)**

OR

A line PQ 100 mm long is inclined at 30° to the H.P. and at 45° to the V.P. Its mid-point is in the V.P. and 20 mm above the H.P. Draw its projections, if its end P is in the third quadrant and Q in the first quadrant. **(12)**

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. A cone, base 75 mm diameter and axis 80 mm long is resting on its base on the H.P. It is cut by a section plane perpendicular to the V.P., inclined at 45° to the H.P. and cutting the axis at a point 35 mm from the apex. Draw its front view, sectional top view, and sectional side view. **(12)**

Q.6. Draw the isometric view of the following object having FV and TV drawn by **third angle projection** method. **(12)**