

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Regular & Supplementary Winter Examination-2023

Course: B. Tech.

Branch : All

Semester : I Sem

Subject Code & Name: BTES103G Engineering Graphics

Max Marks: 60

Date:05-01-24

Duration: 4 Hr.

Instructions to the Students:

1. All the questions are compulsory.
2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in () in front of the question.
3. Use of non-programmable scientific calculators is allowed.
4. Assume suitable data/ Dimensions wherever necessary and mention it clearly.

(Level/
CO) Marks

Q. 1 Solve Any Two of the following.

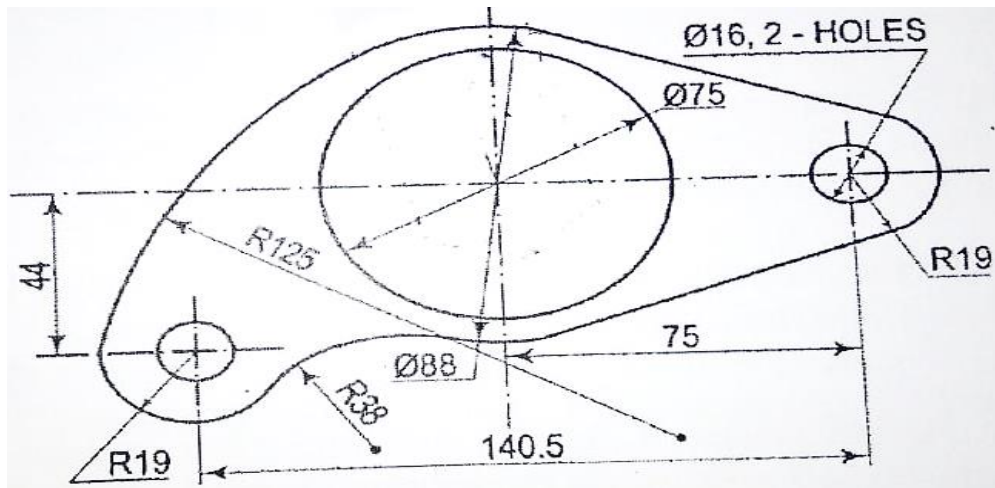
12

A) Draw the regular pentagon of side 30 mm

U 6

B) Redraw the given figure as per dimensions given.

A 6



C) Draw the projections of the following points

U/A 6

1. A point C is on HP and 30 mm behind VP, draw the projections of the point. 3M

2. A point B is on VP and 20 mm above HP draw its projections. 3M

Q.2 Solve Any Two of the following.

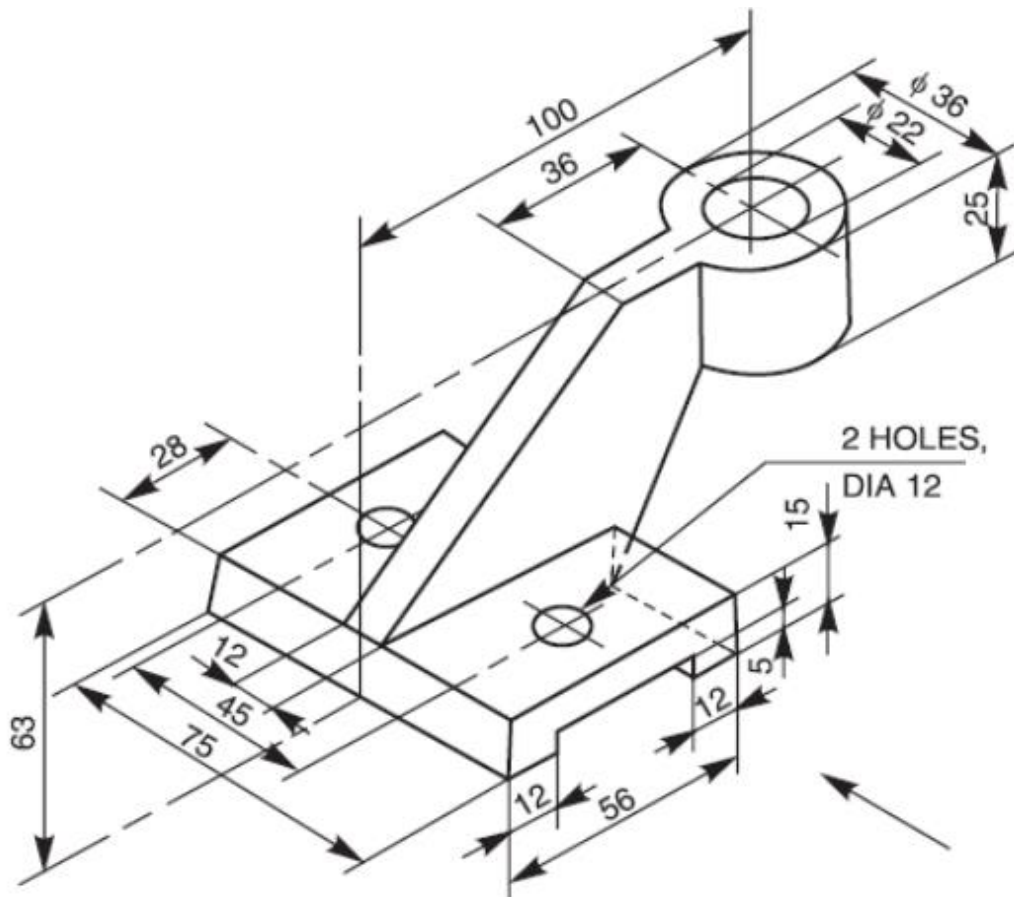
A) Draw the following views of the object in the direction of arrow as shown below,

R/A 12

By using first angle projection method.

a) Front View. 6M

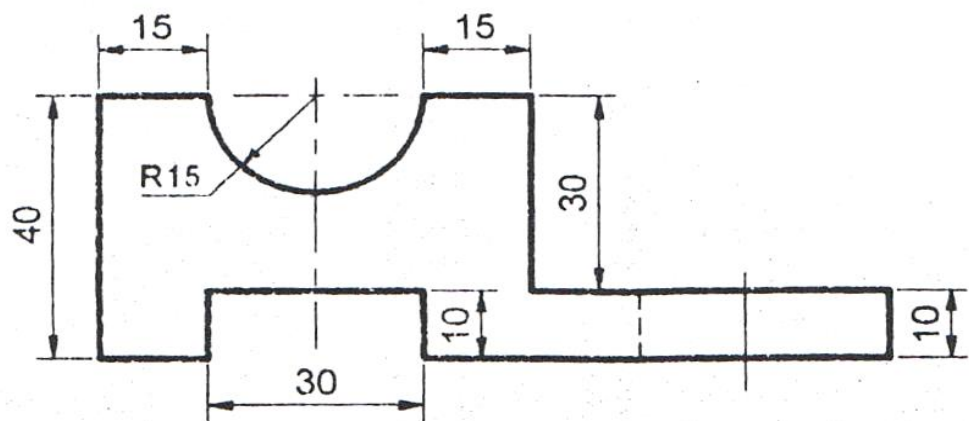
b) Top View. 6M



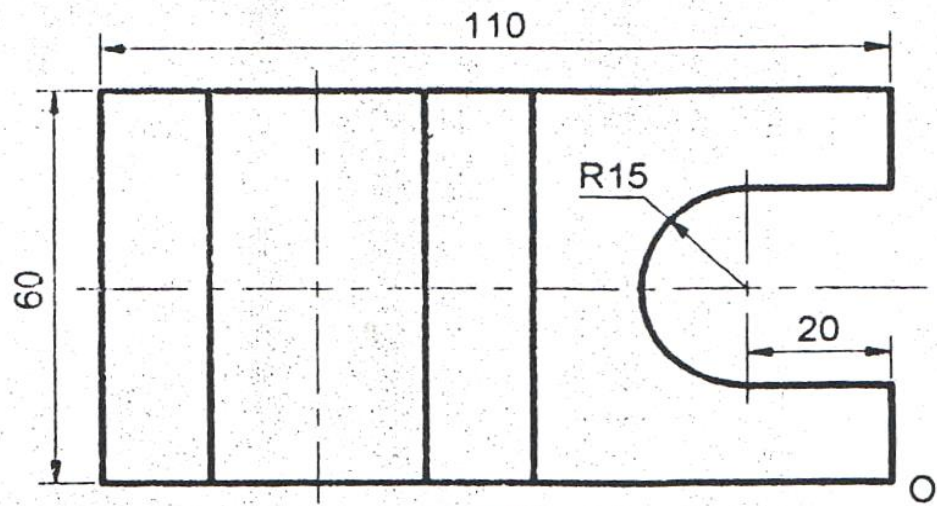
- B) Line AB measures 75 mm and is in first quadrant. Front view and Top view of line inclined at 45° to XY. End A is 20 mm in-front of VP. and 30 mm above HP. Draw the projection of line, determine its true inclination with HP and VP and locate its traces. R/A 12
- C) Draw the projections of a circle of 50 mm diameter resting in the H.P. on a point A on the circumference, its plane inclined at 45° to the H.P. and the top view of the diameter AB making 30° angle with the V.P. R/A 12

Q. 3 Solve Any Two of the following.

- A) A pentagonal prism side of base 30 mm and height 70 mm is resting on ground on one of its corner with a longer edge containing that corner is inclined at 40° to the H.P. and 30° to V.P. Draw the projections of prism. R/A 12
- B) A cone of base diameter 60 mm and axis 80 mm long has one of its generators in V.P. It is cut by sectional plane perpendicular to H.P. and parallel to V.P. Draw Sectional Front View & True Shape of the Section. R/A 12
- C) Figure shows F.V. & T. V. of an object. Draw the Isometric view of the object. R/A 12



F.V.



T.V.