

ID NO: _____

A.D.PATEL INSTITUTE OF TECHNOLOGY
First Year (1st Sem) Internal Exam [GTU] – AE, ME, FT

SUB: Engineering Graphics

Date:01-04-09

Time : 08:00 to 09:00 am

Marks : 20

Note: (01) Retain all the construction Lines
(02) Use both the side of Drawing Sheets
(03) Don't draw border lines and title block

Q-01 OBA is an offset slider crank chain. Crank OB is 30 mm long and rotates in clockwise direction. Connecting rod AB is 128 mm long. Offset is 40 mm. Draw the loci of two points P and R as shown in fig.01 PB=45 mm and BR =30 mm **05**

Q-02 The foci of an ellipse are 90 mm apart and minor axis is 65 mm long. Determine the length of the major axis and draw half the ellipse by concentric circles method and the other half by oblong method. **05**

OR

Q-02 A circle of 50 mm diameter rolls along a straight line without slipping. Draw a curve traced out by a point P on the circumference, for one complete revolution of the circle. Name the curve formed. Draw a tangent to the curve at a point on it 40 mm from line. **05**

Q-03 Draw the following view of the given figure-02 by using first angle projection method **06**
(i) Front View
(ii) Top View

Q-04 1. Give the difference between First angle projection and Third angle Projection method. **04**
2. Define R.F.
3. Define Eccentricity

OR

Q-04 Draw the projection of following points on same XY line. **04**
1) Point A in V.P. and 25 mm below H.P.
2) Point B is 30 mm above H.P. and 25 mm behind V.P.
3) Point C is 15 mm below H.P. and 20 mm in front of V.P.
4) Point D is in H.P. and 10 mm behind V.P.

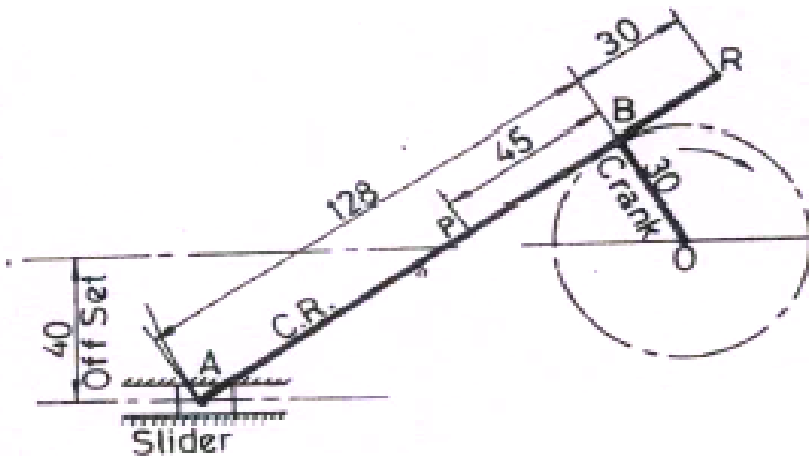


Fig: 01

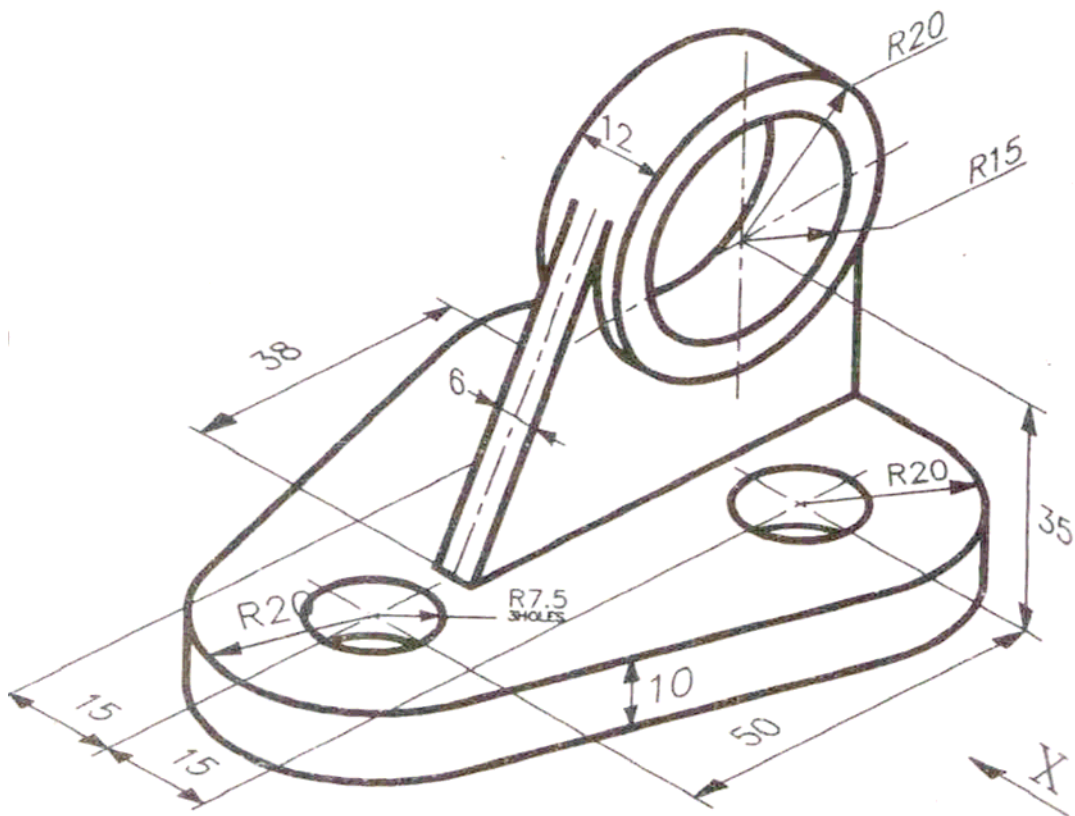


Fig : 02