

**B.TECH. IN AEROSPACE ENGINEERING  
(BTAE)**

**Term-End Examination**

**June, 2010**

**BAS-005 : ENGINEERING DRAWING**

01831

*Time : 3 hours*

*Maximum Marks : 70*

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*Note : Answer any five questions. All questions carry equal marks.*

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1. The major axis is 120 mm. and minor axis is 80 mm. Draw the Ellipse. Find foci for the Ellipse. **14**

**OR**

Draw the parabola in a rectangle having base 70 mm and height 90 mm.

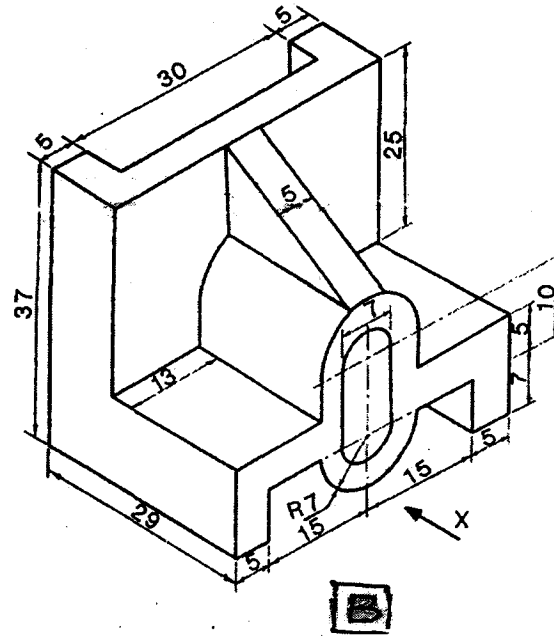
2. A circle of 50 mm dia. rolls on another circle of 175 mm dia from inside and outside. Draw the locus of point P on the circumference of the rolling circle for one complete revolution. **14**

**OR**

Draw an Archimedian spiral for  $1\frac{1}{2}$  convolutions. Take shortest radius as 15 mm and largest radius as 60 mm.



Fig. B shows a Bracket. Draw Front view and Top view by Third Angle Method.



6+8

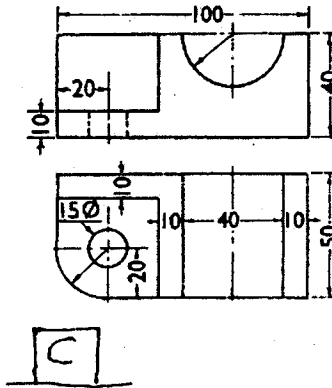
(All dimensions are in mm)

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3

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5. Fig. C shows the orthographic projections of the object. Draw the Isometric projection. 14



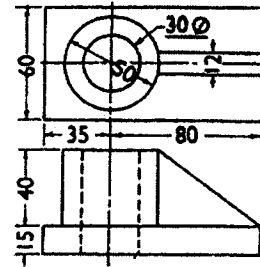
(All dimensions are in mm)

6. (a) Sketch the following thread profiles : 6+8
- (i) ISO (Metric Thread)
  - (ii) BSW
  - (iii) Square Threads
- (b) Sketch any three locking arrangements.

7. Sketch double rivetted Lap Joint (chain type), 14  
front view full in section and top view.
8. (a) Sketch Ball and Roller Bearing 7+7  
(b) Sketch Muff coupling (two views)

OR

Fig. D shows the orthographic projections of the object. Draw the Isometric view.



(Third-angle projection)

D

(All dimensions are in mm)