

# MUMBAI UNIVERSITY

# SEMESTER-1

# ENGINEERING DRAWING SOLVED PAPER - MAY 2018

- N.B:-(1) Solve any FOUR questions.
  - (2) All the dimensions are in mm.
  - (3) Use first angle method of projection.
  - (4) Assume suitable dimension if it is necessary.
  - (5) Retain all construction lines.



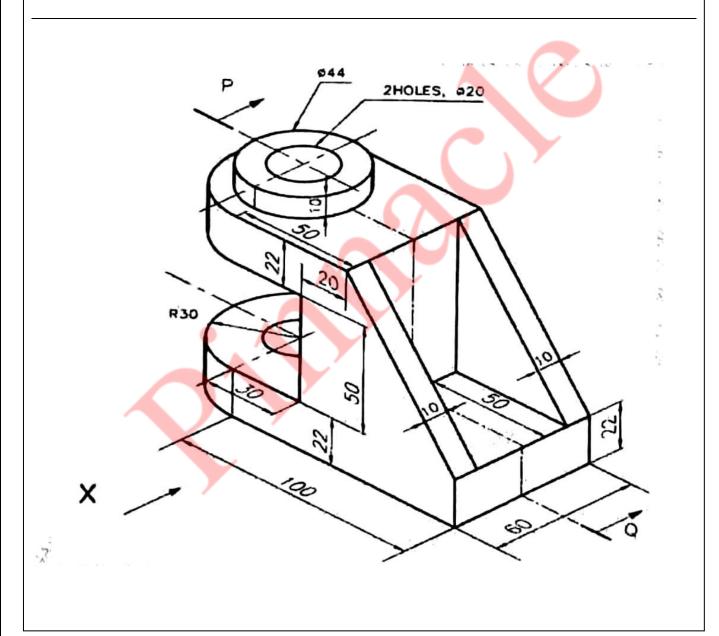
Q.1 Following figure shows the pictorial view of an object,draw (15 marks)

(1) Section front view along section PQ (5 marks)

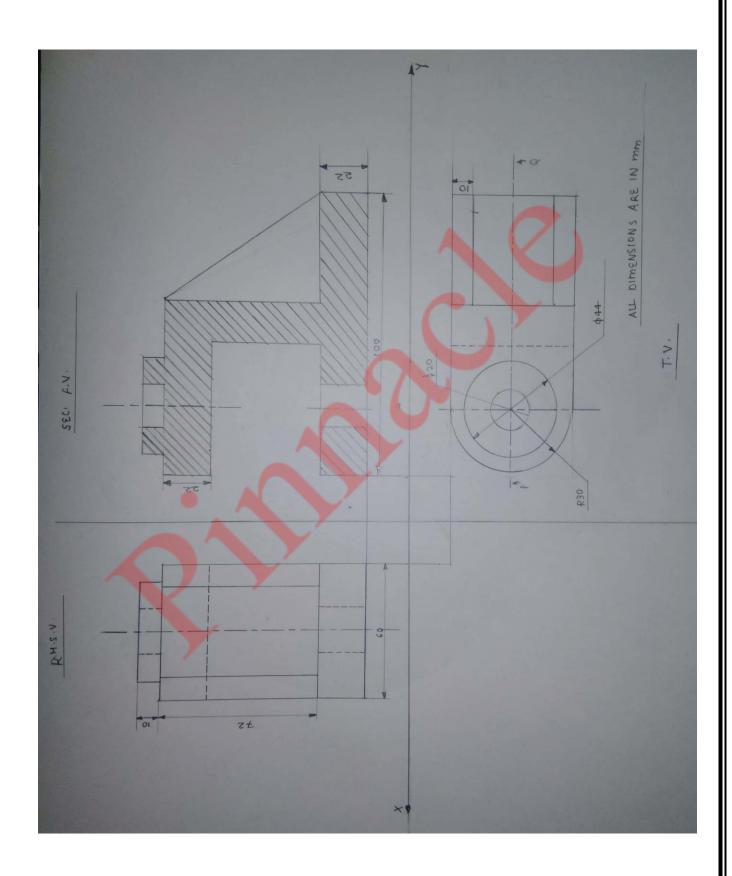
(2) Top view (4 marks)

(3) Right hand side view (4 marks)

(4) Insert 10 major dimensions (2 marks)







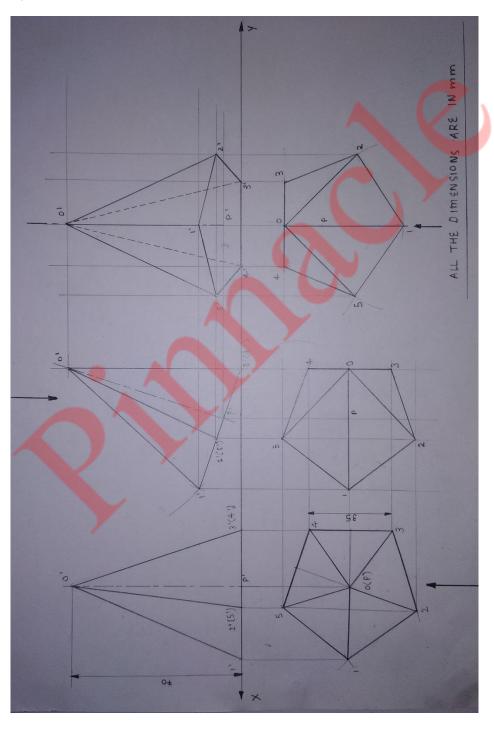


Q.2 A pentagonal pyramid side of base 35 mm and height 70 mm is having one of it's base edge in HP with triangular face containing this edge perpendicular to HP,parallel to VP and away from observer.

Draw its projections.

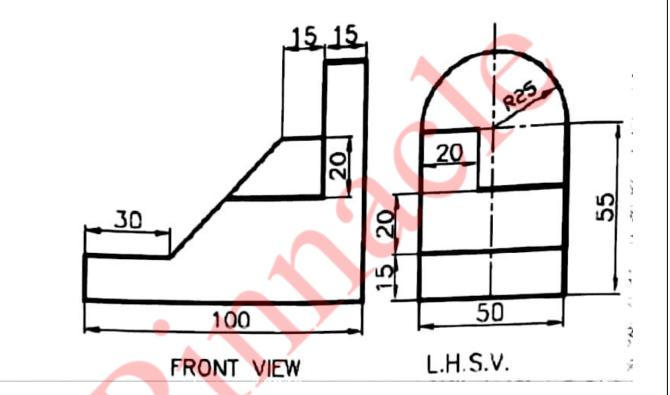
(15 marks)

#### **DRAWING:**

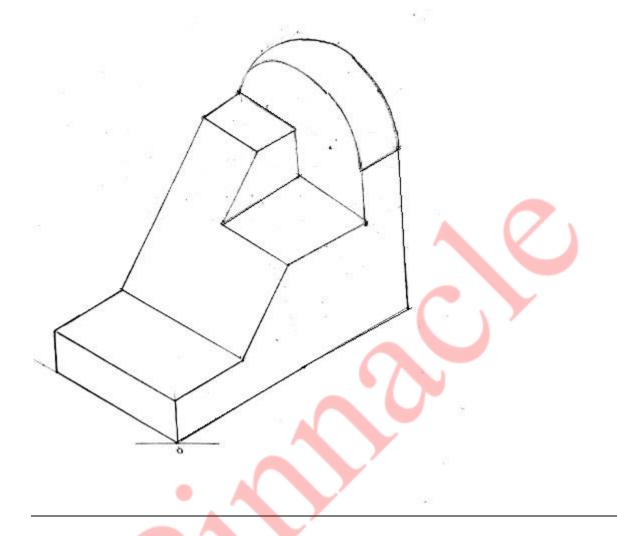




Q.3(a)Front view and side view of an object is shown in figure,draw the isometric view. (8 marks)







Q.3(b)Draw the elevation and plan of a cube of side 50 mm resting on one of it's corner of base on HP with solid diagonal perpendicular to VP. (7 marks)

**DRAWING:** 







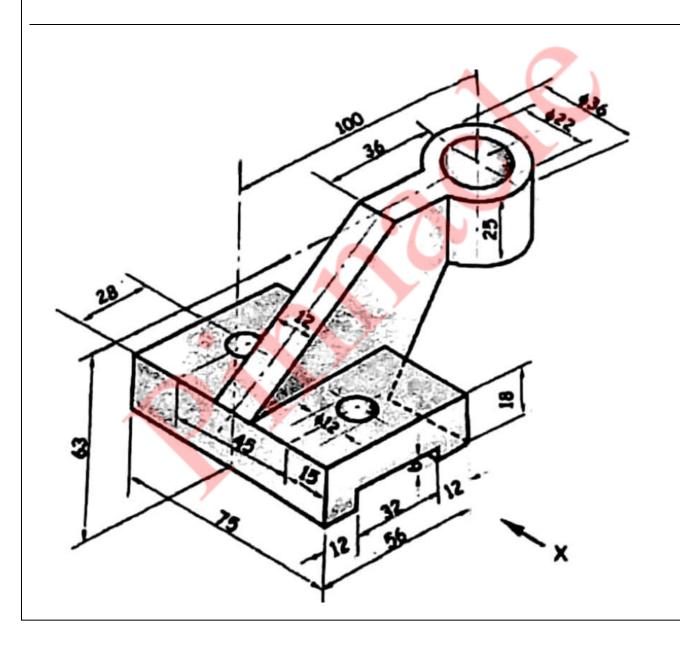
Q.4(a) The pictorial view of a machine part is shown in the following figure.

Draw: (9 marks)

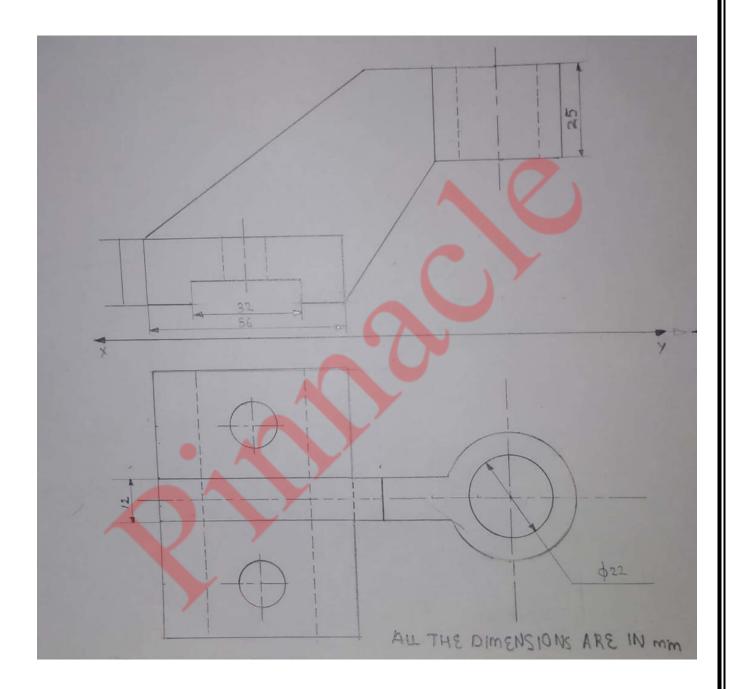
(1) Front view from X (4 marks)

(2) Top view (4 marks)

(3) Insert at least 6 dimensions (1 mark)



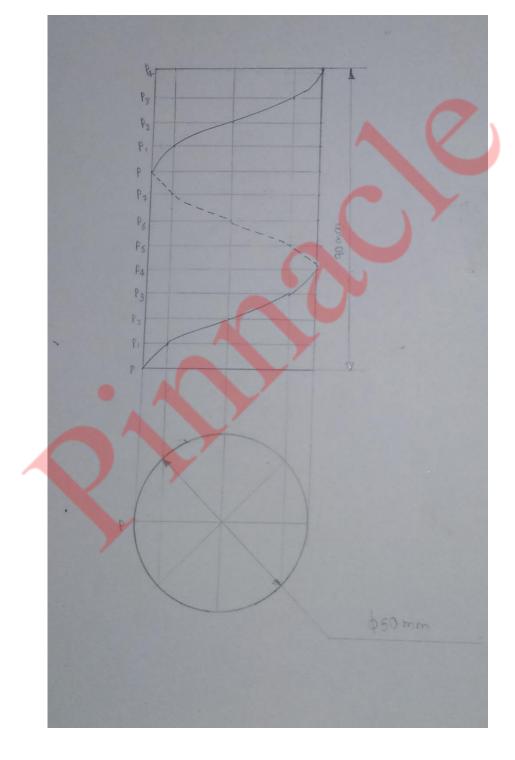






Q.4(b)Draw 1.5 revolution of a cylindrical helix of pitch 60 mm on a cylinder of 50 mm diameter.

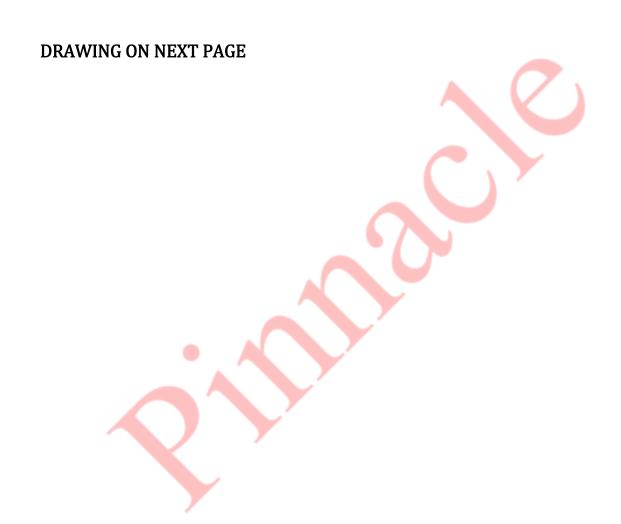
#### **DRAWING:**



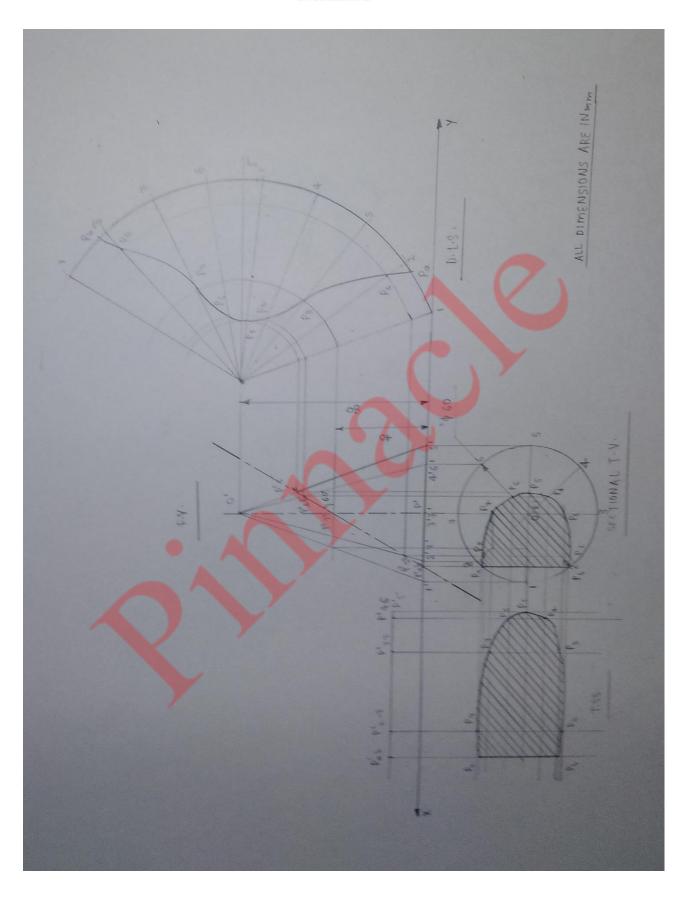


Q.5 right circular cone having diameter of base 60 mm,axis length 80 mm resting on it's base on HP is cut by cutting plane perpendicular to VP and inclined to HP at 60o,bisects the axis.

Draw it's front view, sectional top view and true shape of section. Also draw the development of lateral surface of the cone after removing the portion containing the apex. (15 marks)





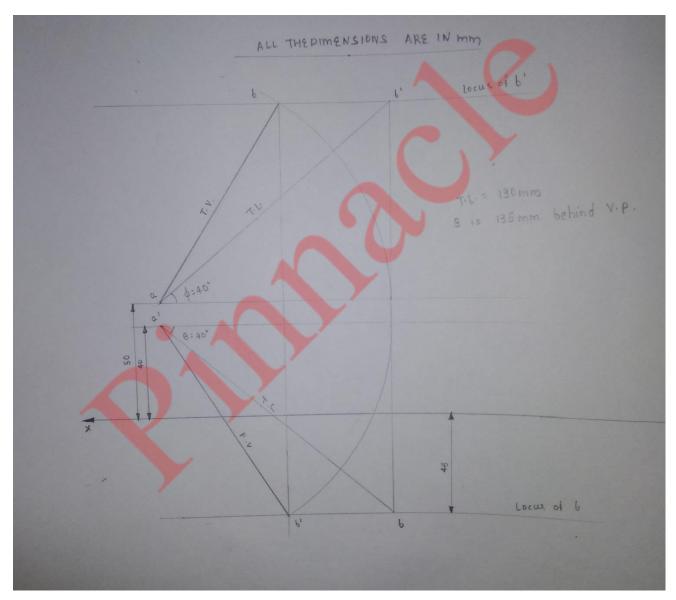




Q.6(a)End A of line AB is in second quadrant and is 40 mm and 15 mm from HP and VP respectively. The line is inclined at 400 to both the reference planes.

Draw it's projection when end B is in third quadrant and 45 mm from HP.Find the true length and distance of end B from VP. (8 marks)

#### **DRAWING:**





Q.6(b)Front view and side view of an object are shown in figure.

Draw the isometric view. (7 marks)

