BOARD DIPLOMA EXAMINATIONSMODEL QUESTION PAPER

D.M.E. – I YEAR EXAMINATION

ENGINEERING DRAWING

Instructions: **01.** **All the dimensions are in mm**

02. Use first angle projections only

03. **Due Weightage will be given for the dimensioning and neatness**

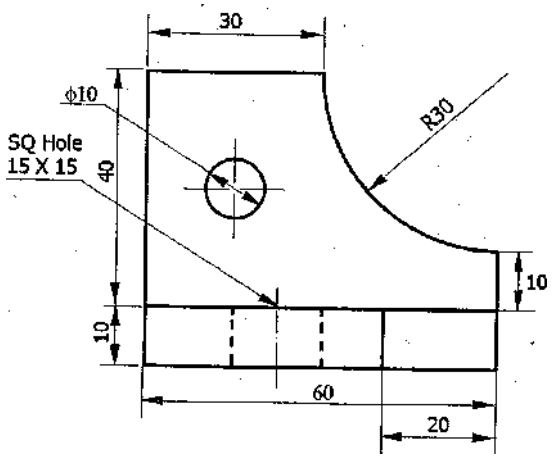
PART – A 04 x 05=20

01. **Answer all the questions**

02. Each question carries FIVE marks

01. Write the following in single stroke capital vertical lettering of size 10mmORTHOGRAPHIC PROJECTIONS

02. Redraw the given fig. and dimension it according to SP-46:1988.Assume suitable scale



03. Draw internal common tangents to two unequal circles of radii 26mm and 20mm.Thedistance between the circles is 75mm.

04. Draw the projections of a regular pentagon of side length 40 mm inclined to the H.P. by $30^0$and perpendicular to V.P. using auxiliary plane method

PART – B 04 X 10 = 40

01. **Answer any FOUR of the following questions**

02. Each question carries TEN marks

05. Draw the involute of a circle of diameter 30 mm and also draw a tangent to the curve at a distance of 60 mm from the centre of the

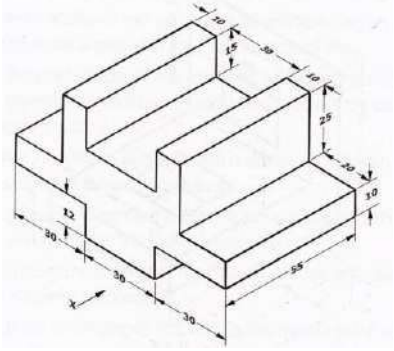
circle.

06. A right circular cone of height 80 mm and base radius 60 mm is resting in the H.P. on one of its generators and its axis is parallel to V.P. Draw the projections of the solid.

07. A regular hexagonal prism of height 80 mm and base side 40 mm is resting in the H.P. on its base. It is cut by an auxiliary inclined plane of 60^0 inclination passing through the axis at a distance of 30 mm from the top base. Draw the sectional views of the solid and the true section.

08. A pentagonal pyramid of height 80 mm and base side 40 mm is resting in the H.P. on its base such that one of the sides of the base is perpendicular to the V.P. It is cut by a section plane perpendicular to the V.P. and inclined to the H.P. by 60^0 and passing through the axis at a distance of 25 mm from the base. Draw the development of the lateral surface of the truncated pyramid.

09. Draw the front view, top view and left side view of the object shown in the fig.



10. Draw the isometric view of the component whose orthographic projections are given below