

Model Question Paper-1



FACULTY OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

Second Semester B.E. Degree Examination - 2020

ENGINEERING DRAWING (19KBEDR24)

Time: 3 Hours

(COMMON TO ALL BRANCHES)

Max. Marks: 100

Note:

1. Answer three full questions
2. Use A4 sheets supplied.
3. Draw to actual scale suitably.
4. Missing data, if any, may be assumed suitably.

1. a. A point P is 30 mm in front of VP, 40 mm above HP and 50 mm from RPP. Draw its projections. 10 Marks

b. A line AB 80 mm long has its end A 20 mm above HP and 30 mm in front of VP. It is inclined at 30 deg. to HP and 45 deg. to VP. Draw the projections of the line and find apparent lengths and apparent inclinations. 20 Marks

OR

A Triangular plane figure of sides 25 mm is resting on HP with one of its corners, such that the surface of the lamina makes an angle of 60° with HP. If the side opposite to the corner on which the lamina rests makes an angle of 30° with VP. Draw the top and front views in this position. 30 Marks

2. A Square pyramid 25 mm sides of base and 60 mm axis length rests on HP on one its corners of the base such that two base edges containing the corner on which it rests make equal inclinations with HP. Draw the projections of the pyramid when the axis is inclined to HP at 40° and to VP at 30° . 40 Marks

3. A right cone of 55 mm diameter of base and 75 mm height stands on its base on HP. It is cut to the shape of truncated cone with its truncated surface inclined at 45 deg. to the axis lying at a distance of 40 mm from the apex of the cone. Obtain the development of the lateral surface of the truncated cone. 30 Marks

OR

A sphere of diameter 50 mm rests centrally on top of a cube of sides 50 mm. Draw the isometric projections of the combinations of solids. 30 Marks
