Roll No. ..... Total Pages : 2

BT-1/D-18 **31020**

ENGINEERING DRAWING AND GRAPHICS

(Odd)

Paper : ME-105(N)

Time : Three Hours] [Maximum Marks : 75

Note : Attempt *five* questions in all, selecting at least *one* question from each unit.

UNIT–I

1. The Shortest distance of a point E from reference line is 50 mm. Draw its projections if the point is placed at a height of 26 mm above H.P. Mention all assumptions regarding quadrant and scale used clearly alongside the solution. 15

2. A Line PQ 108 mm long has its plan and elevation lengths 60 mm and 90 mm respectively. One end of the line P is in HP while the other end is in VP. Draw its projections. 15

UNIT–II

3. A Pentagonal plate of side 35 mm is placed with one side on HP and the surface inclined at 50° to HP perpendicular to VP. Draw its projections. 15

4. A tetrahedron of side 40 mm rests with its base on HP. Draw its projections when one of its edges is perpendicular to VP. 15

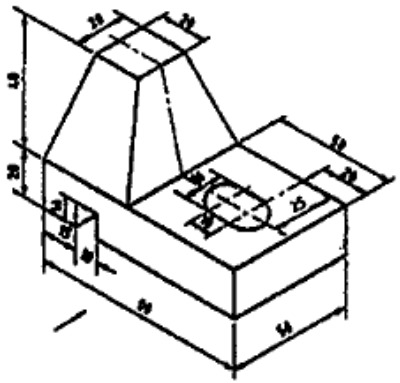
UNIT–III

5. A square pyramid of base side 30 mm and axis length 60 mm is resting on HP on its base with one side of base inclined at 30° to VP. It is cut by a plane inclined at 45° to HP and perpendicular to VP and passes through the axis at a distance 25 mm from the apex. Draw its front view, Sectional top view and true shape of the section. 15

6. A hexagonal pyramid of side 30 mm and altitude 60 mm resting on HP on its base with two of the base sides perpendicular to VP. The pyramid is cut by a plane inclined at 30° to HP and perpendicular to VP. The pyramid is cut by a plane inclined at 30° to HP and perpendicular to VP and is bisecting the axis. Draw the development of the remaining portion of the pyramid. 15

UNIT–IV

7. Draw the front view, top view and side view of the following object : 15



8. Draw the three orthographic views of Hexagonal Nut. 15