

Roll No.

Total Pages : 03

BT-2/M-19

32029

ENGINEERING DRAWING AND GRAPHICS
ME-105N (Group IV)

Time : Three Hours]

[Maximum Marks : 75

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

Unit I

1. Draw the projections of the following points on a common reference line, taking a gap of 25 mm between two consecutive vertical projectors : 15
 - (i) Point E 30 mm above HP and 20 mm behind VP
 - (ii) Point F 20 mm above HP and 15 mm in front of VP
 - (iii) Point G 40 mm above HP and in VP
 - (iv) Point H 25 mm above HP and 30 mm behind VP
 - (v) Point T 33 mm above HP and 28 mm in front of VP

2. A line AB has its end A 20 mm above HP and 25 mm in front of VP. The other end B is 45 mm above HP and 40 mm in front of VP. The distance between the end projectors is 60 mm. Draw its projections, also find the true length and true inclinations of the line with HP and VP and mark the traces. 15

Unit II

3. A circular plate of negligible thickness and 60 mm diameter appears as an ellipse in the top view, having its major axis 60 mm and minor axis 30 mm. Draw its projections and find the inclination of the plate with HP. 15

4. A square pyramid of base side 40 mm and altitude 60 mm is lying on the VP on one of its triangular faces with the plane having the axis is parallel to VP and 30 mm above it. Draw the projections of pyramid. 15

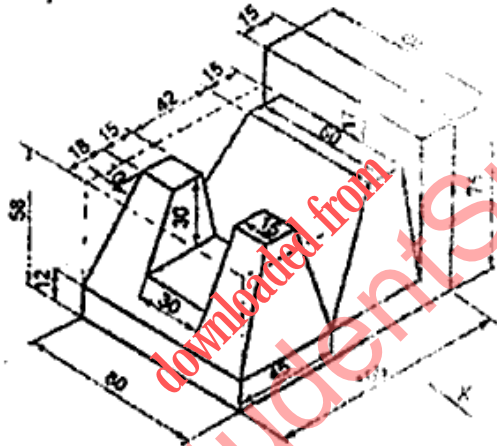
Unit III

5. A cone of base diameter 40 mm and altitude 70 mm rests on its base on the HP. It is cut by a plane perpendicular to the VP and parallel to one of the extreme generators, 15 mm away from it. Draw the sectional plan and the true shape of the section. 15

6. A pentagonal pyramid, side of base 32 mm and axis 60 mm long, has its base horizontal and an edge of the base perpendicular to the VP. A Horizontal section plane cuts it at a distance of 25 mm above the base. Draw its front view and sectional top view. 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 Bolt. 15