Roll No. ....   Total Pages : 03

BT-2/M-19   32030

ENGINEERING DRAWING
AND GRAPHICS (EVAN)
ME-105N

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**

    (a)   Point E 15 mm above H.P. and 32 mm in front of V.P.

    (b)   Point F 40 mm above H.P. and 25 mm behind V.P.

    (c)   Point G 20 mm H.P. and in V.P.

    (d)   Point H 20 mm below H.P. and 40 mm behind V.P.

    (e)   Point U 24 mm above H.P. and in V.P.

2. Front view of a line PQ is inclined at 30° to XY line and measures 60 mm. The line is inclined at 45° to VP. The end P is in HP and VT of the line is 20 mm below HP.

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Draw the projections of the line and find its true length and inclinations with the reference planes. Also locate its HT.   **15**

Unit II

3. An equilateral triangle shaped plate of side 30 mm is placed parallel to HP and 10 mm above it. It is placed, such that, one of the corners of the triangle is 10 mm in front of VP and the edge containing that corner is inclined at 25° to VP. Draw the Projections of the plate.   **15**

4. Draw the projections of Pentagonal pyramid of base side 30 mm long and height 55 mm long. The pyramid is resting on one base side on HP with its Axis parallel to VP and inclined at 40° to HP.   **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 40° to VP. It is cut by a plane inclined at 30° 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**

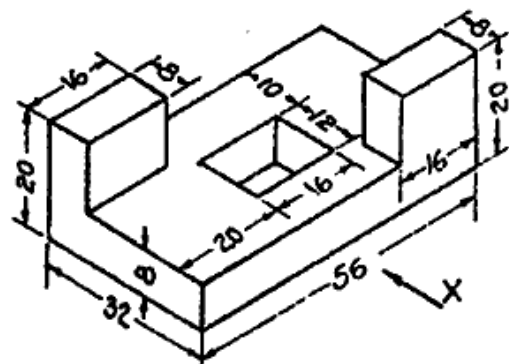L-32030   2

6. A pentagonal pyramid, side of base 30 mm and axis 65 mm long, has its base lying on horizontal plane 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. Describe the application of the following AUTOCAD commands :   15
    (a) Line   (b) Circle
    (c) Arc   (d) Polyline
    (e) Ellipse.

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