1050

Code : 15ME21D

Register Number | | | | | | | | | | |

II Semester Diploma Examination, Oct./Nov.-2019

ENGINEERING GRAPHICS – II

Time : 4 Hours] [Max. Marks : 100

Note : (i) PART – A is compulsory.

(ii) Answer any **two** full questions from PART – **B**, **C** and **D**.

(iii) All Dimensions are in mm.

(iv) Missing Dimensions if any may be assumed.

PART – A

1. A Hexagonal prism of base 35 mm and height 60 mm is resting with edge on HP so that the rectangular lateral surface containing this base edge is inclined at 60° and perpendicular to VP. Draw its projections. **10**

PART – B

2. A square pyramid of base edge 40 mm and 60 mm long has one of its edge on HP. The axis of pyramid is inclined at 30° to HP and appears to be inclined 45° to the VP. Draw the projections if the apex is nearer to observer. **15**

3. An equilateral triangular prism of base side 35 mm and 55 mm long rests with one of its edges on HP so that the rectangular face containing the edge on which prism rests inclined at 30° to the HP. The edge on which the prism rests is inclined at 60° to VP. Draw its projections. **15**

4. A square prism side of base 40 mm and axis 60 mm long rests with its base on HP such that one of its rectangular faces is inclined at 30° to VP. A sectional plane perpendicular to HP and inclined at 60° to VP passes through the prism at a distance of 10 mm from the axis. Draw the top view, sectional front view and true shape of the section. **15**

Draw the isom

PART – C

5. A Hexagonal pyramid 20 mm side of base and 50 mm high is resting with its base on HP such that an edge of the base is parallel to VP. A cutting plane inclined at 30° to HP and perpendicular to VP bisects the axis of the pyramid. Draw the front view, sectional top view and true shape of the section of it. **15**

6. A vertical cylinder 80 mm diameter and 100 mm long is cut by a section. Plane perpendicular to the VP and inclined at 45° to the HP and passing through the top end of the end generator in the front view. Develop the lower portion of the cylinder. **15**

7. A frustum of a Hexagonal pyramid of base edge 40 mm and top face edge 20 mm and height 70 mm rests with its base on HP such that one of its base edge is parallel to VP. Develop the lateral surface area of the solid. **15**

PART – D

8. Draw the three Principle views of the object shown in fig.1. **15**

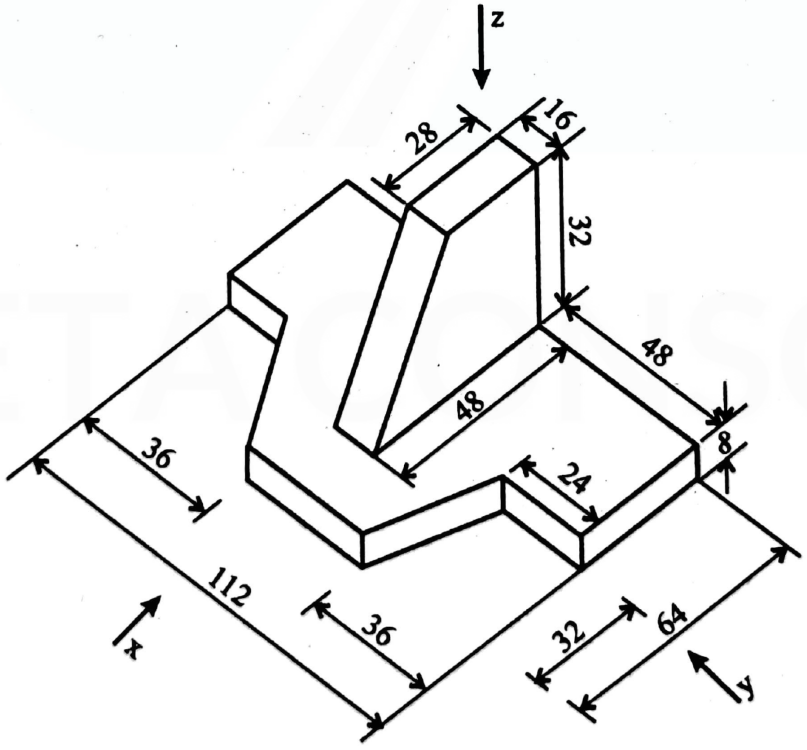

Fig. 1

9. Draw the isometric view of the component shown in fig.2. 15

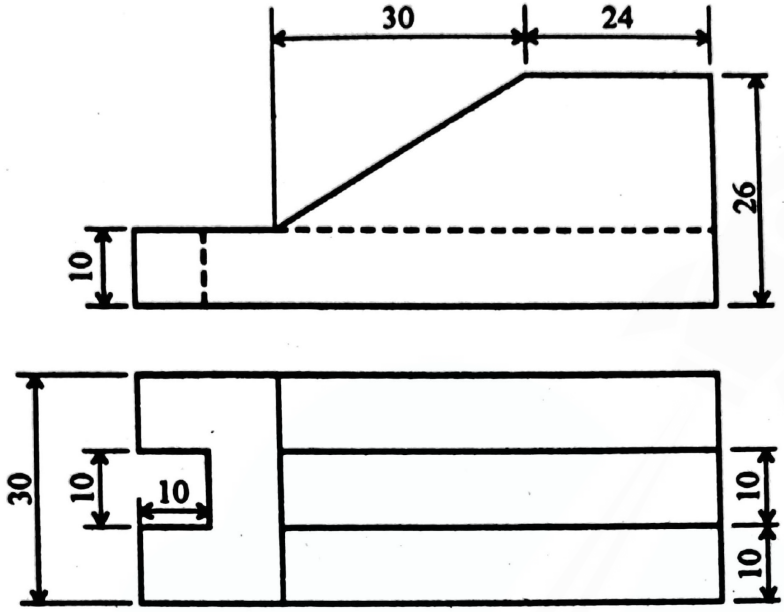

Fig. 2

10. A sphere ϕ 30 mm is kept centrally over frustum of square pyramid of bottom base 60 mm & top base 40 mm and height 40 mm. Draw the Isometric view of combination of solids. 15