

1237**Code : 15ME-21D**Register
Number

--	--	--	--	--	--	--

II Semester Diploma Examination, Nov./Dec. 2016**ENGINEERING GRAPHICS – II****Time : 3 Hours]****[Max. Marks : 100**

- Note :** (i) PART – A is *compulsory*.
(ii) Answer any **two** full questions from PART – B, C & D

PART – A

1. A pentagonal pyramid of base edge 35 mm and axis height 65 mm rests with one of its base corners on HP, so that the axis of the pyramid is inclined at 45° to the HP. Draw the projections if the axis of the pyramid is parallel to the VP. **10**

PART – B

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

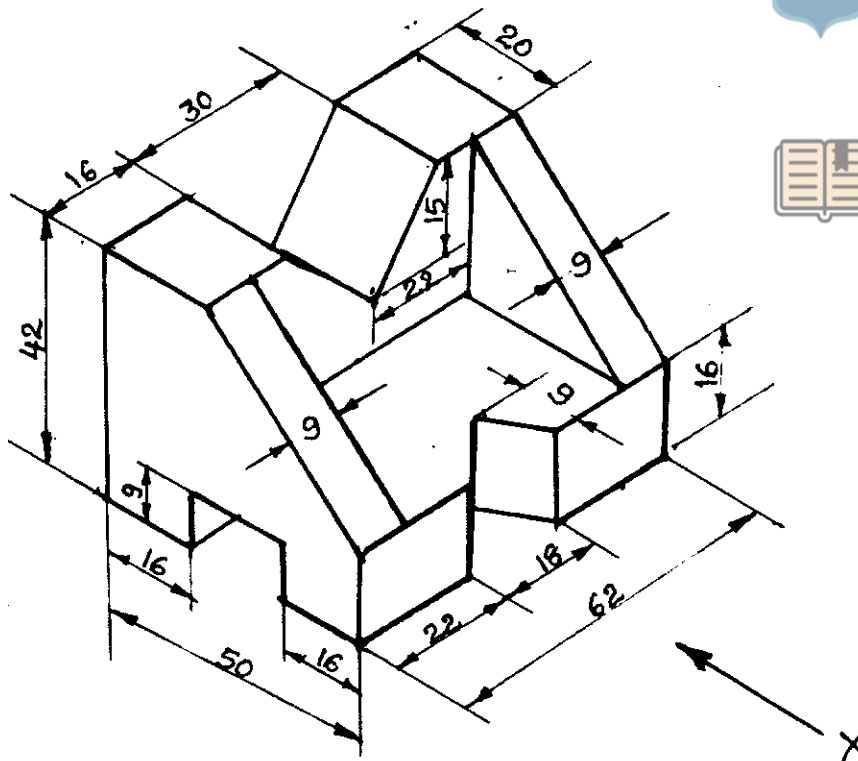
3. A cone of base diameter 50 mm and altitude 70 mm is lying with one of its generators on HP and the axis appears to be inclined to VP at an angle of 40° in the top view. Draw its top and front views. **15**
4. A hexagonal pyramid of base edge 35 mm and axis 80 mm rests with its base on HP so that two of its edges are parallel to VP. It is cut by a section plane perpendicular to VP and inclined at 45° to HP. The section plane cuts the pyramid at a distance of 30 mm above the base. Draw the sectional top view and true shape of the section. **15**

PART – C

5. A cube of 30 mm edges rests with a square face on HP such that one of its vertical square face is inclined at 30° to VP. A section plane perpendicular to VP and inclined at 60° to HP passes through a point on the axis 5 mm below its top end. Draw its sectional top view, front view and true shape of the section. 15
6. A vertical cylinder of base diameter 80 mm and axis length 100 mm is cut by a section plane perpendicular to VP and inclined at 45° to HP. Vertical trace of the section plane passes through the top end of one of the extreme generators. Develop the lower portion of the lateral surface of the cylinder. 15
7. A square pyramid of 45 mm side of base and height 70 mm rests with its base on HP with one of the edges of the base parallel to VP. It is cut by a section plane perpendicular to VP and inclined at 40° to HP and bisecting the axis. Draw the development of the truncated pyramid. 15

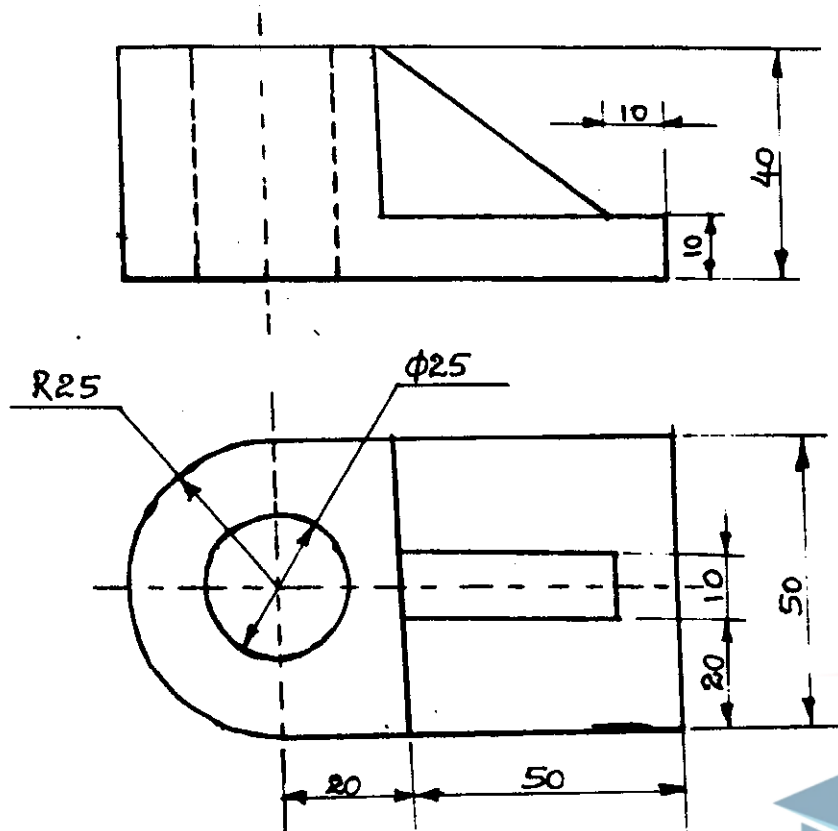
PART – D

8. Draw the three principal views of the component as shown in figure.



9. Draw the isometric view of the machine component whose orthographic views are given below :

15



BETA CONSOLE!

Diploma - [All Branches]

Beta Console Education

3+



10. A cylindrical block of 40 mm diameter and length 50 mm is resting vertically on the center of the cube of 70 mm side. Draw the isometric projection of the combination of solids.



Beta Console Education

3+

15