SATHYABAMA UNIVERSITY

(Established under section 3 of UGC Act, 1956)

Course & Branch: B. E./ B. Tech - EIE/E&C/CSE/IT/ECE/EEE/

ETCE/BME

Title of the paper: Engineering Graphics

Semester: I Max. Marks: 80 Sub.Code: 5ET116/6C0005(2006/2007) Time: 3 Hours

Date: 18-12-2007 Session: FN

PART - A

 $(10 \times 2 = 20)$

Answer All the Questions

- 1. List out different types of dimensioning
- 2. Define the dimension line with an example
- 3. Distinguish pyramid and prism.
- 4. Define polyhedra and give its type.
- 5. What is sectional plane?
- 6. Why do you study the development of surfaces?
- 7. Give the main divisions of pictorial drawing.
- 8. Write application of perspective projection.
- 9. Write differences between orthographic and pictorial views.
- 10. What are the principles of orthographic views?

PART – B

 $(5 \times 12 = 60)$

Answer All the Questions

11. A regular pentagonal lamina of 25 mm side has its vertical traces is parallel and 20mm above XY. One of its side is making an angle of 25° with vertical plane and the lamina perpendicular to VP. Draw its projections.

(or)

12. A line AB 80mm long had its end A 60mm infront of VP and 15mm above HP. The line is inclined at 50° to HP and 40° VP. Draw the projections of the line and find its vertical and horizontal traces.

13. Draw the projection of rectangular pyramid with the base sides of 40 mm and 30 mm, height of pyramid is 60mm. Its apex is 40mm infont of the VP and one of the longer face is 30° inclined to VP. Also draw its right side and left views.

(or)

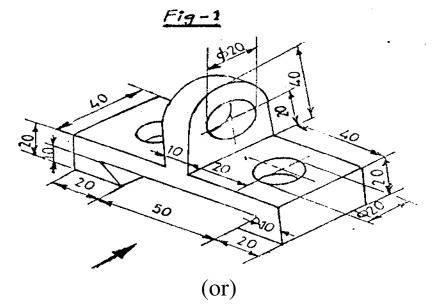
- 14. A Tetrahedron of side 50mm long resting on ground on one of its faces with an edge of face inclined 45° to the VP.
- 15. A cone of base 50mm diameter and axis 60mm long, lies on HP on of its generators with its axis parallel to VP. A horizontal section plane bisects the axis of the cone. Draw the font and sectional top view.

(or)

- 16. Draw the development of the cube side 40 mm rests on its face with all edges equally inclined to VP, which is cut by a plane inclined at 30° to HP passing through the tube of the left corner of the cube.
- 17. Draw the isomeric view of a frustum of hexagonal pyramid when it is resting on its base on the HP with two sides of the parallel to the VP. The side of base is 20mm and top 8mm the height of the frustum is 55mm.

(or)

- 18. A point A is 15mm behind pictorial plane and 25mm above ground plane. The central plane is 30mm to the left of the point. The station point is 35mm infont of pictorial plane and 40mm about ground plane. Draw the perspective view of a point using any one method.
- 19. Draw the three Orthographic views of the given Figure 1



20. Construct Pictorial drawing from the given figure -2.

