

Hall Ticket Number:

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

Code No. : 12016 ED

VASAVI COLLEGE OF ENGINEERING (Autonomous), HYDERABAD
B.E. (CBCS) II-Semester New Examinations, May/June-2018

Engineering Drawing-II
(CSE, ECE & IT)

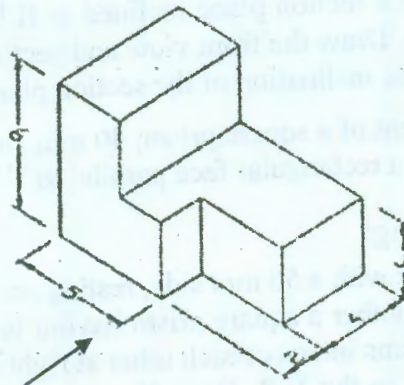
Time: 3 hours

Max. Marks: 60

Note: Answer ALL questions in Part-A and any FIVE from Part-B

Part-A (10 × 2 = 20 Marks)

1. Distinguish between section and section plane.
2. How would you locate the section plane which cuts the square pyramid to get trapezium as true shape of section?
3. What are the dimensions of the cone whose development is a semicircle of 120 mm diameter?
4. State the applications of development of surfaces.
5. Name the methods of determining the curves of intersection.
6. Describe the conditions in which the curves of inter section between a cylinder and a cylinder is represented by straight lines.
7. Drawing Isometric projection of a circular plane of diameter 40mm.
8. Define and draw isometric scale.
9. Draw the right side view from the below figure (dimensions are in centimeters).



10. Write the steps involved in drawing front view in the above figure.

Part-B (5 × 8 = 40 Marks)

11. a) A pentagonal pyramid, having a base with 30 mm side and a 60 mm long axis, is lying on the triangular face in the H.P. with its axis parallel to the V.P. It is cut by a horizontal section plane passing through the centroid of pyramid. Draw front view and sectional top view. [6]
b) Show by means of the drawing the sectional line is inclined to the axis of a cone (diameter 30mm and axis 50mm), the sectional shape is ellipse. [2]
12. a) A cone with a 50 mm base diameter and a 70 mm long axis, rests on its base on the H.P. Draw the development of its lateral surface when it is cut by a plane perpendicular to V.P., bisecting the axis and inclined at 60° the H.P. passing through a point on axis 20mm below the apex. [6]
b) Explain 'Parallel Line' development of solids. [2]

Contd....2

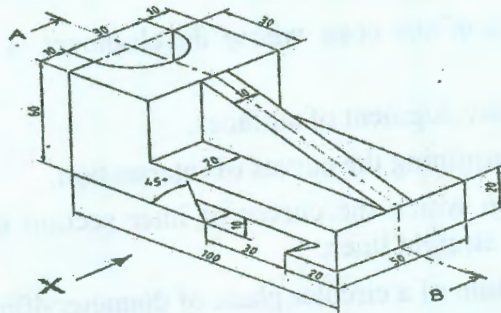
13. a) A vertical cylinder having base with a 70 mm diameter is resting on its base on the H.P. It is penetrated by another cylinder having with a base of 50 mm diameter, the axis of which is parallel to both the principal planes. The two axes are 6 mm apart. Draw the projections of the combination and show the curves of intersections. [6]

b) List out the classification of intersecting surfaces. [2]

14. a) A sphere with a 60 mm diameter is surmounted centrally on the top of square block with a 70 mm side and 20 mm thickness. Draw isometric projection of the arrangement. [6]

b) Define isometric axes and isometric plane. [2]

15. a) Draw front view and top view of the figure given below. [6]



b) Differences between isometric view and orthogonal view in first angle projections. [2]

16. a) A cube of 50mm side, rests on one of its face on H.P. with its vertical faces equally inclined to V.P. it is cut by a section plane inclined to H.P. and perpendicular to V.P., producing a large rhombus. Draw the front view and sectional top view and true shape of the section. Determine the inclination of the section plane with H.P. [4]

b) Draw the lateral development of a square prism, 40 mm side and a 60 mm axis, resting on its base in the H.P. with a rectangular face parallel to V.P. [4]

17. Answer any *two* of the following:

a) A square prism, having base with a 50 mm side, resting on its base on the H.P. It is completely penetrated by another a square prism having base with a 40 mm side, such that the axes of both the prisms intersect each other at right angles and faces of both the prisms are equally inclined to the V.P. Draw the projections of the combination and show the lines of intersections. [4]

b) Draw the isometric view of the frustum of the hexagonal pyramid having a base with 30 mm side, top base side is 20mm and 60 mm long axis. Assume that the axis is vertical. [4]

c) Draw orthographic projections from a given below isometric view. Draw Top view and a front view. [4]

