

Hall Ticket Number:

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

Code No. : 12327 N/O

VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS), HYDERABAD

Accredited by NAAC with A++ Grade

B.E. II-Semester Main &amp; Backlog Examinations, August-2023

Basic Engineering Drawing

(Common to EEE &amp; ECE)

Time: 3 hours

Max. Marks: 60

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

Part-A (10 × 2 = 20 Marks)

Q. No.	Stem of the question	M	L	CO	PO
1.	State any three rules of dimensioning.	2	1	1	1
2.	Show the representation and mention one of the applications of following (a) Outline (b) Hidden line	2	1	1	1
3.	Sketch the symbol for first and third angle projection.s.	2	1	2	1
4.	Draw the projections of a point (i)A, 10mm below HP and on the VP (ii) B, 15mm above the HP and 10mm in front of VP. Consider the perpendicular distance between projectors as 30 mm and take a common reference line for projections of A,B.	2	2	2	2
5.	Define (i) Perpendicular plane and (ii) Oblique planes.	2	1	3	1
6.	Define trace of a plane with a sketch.	2	1	3	1
7.	What are solids of revolution? Give any two examples.	2	1	4	1
8.	What are the applications of developments of solids?	2	1	4	1
9.	Define Isometric axes.	2	1	5	1
10.	What is the isometric view of a (i) Square (ii) Circle	2	3	5	1
<b>Part-B (5 × 8 = 40 Marks)</b>					
11. a)	Draw a regular pentagon of 30mm side.	3	2	1	2
b)	Draw a parabola if the distance from focus to directrix is 50mm.	5	3	1	2
12. a)	Discuss the concept of Orthographic projections.	3	2	2	1
b)	The top view of a 75 mm long line AB measures 50 mm. A is 50 mm in front of VP and 15 mm above the HP. B is 15 mm in front of VP and is above the HP. Draw the front view of AB and find its inclinations with the HP and the VP. Also, mark the traces.	5	4	2	2
13. a)	A square plane of 40mm sides is kept parallel to HP and 20mm above it. Draw its projections and mark the traces.	3	2	3	2
b)	A thin rectangular plate of sides 60mmX30mm appears like a square in the front view. If one of the shorter side is in the VP and inclined at 30° to the HP, draw the projections.	5	4	3	2

Contd... 2

14. a)	Give examples of Polyhedra.	3	2	4	1
b)	A hexagonal prism, base 40 mm side and height 65 mm, has its axis inclined at 45° to the H.P and is parallel to V.P, has an edge of its base, on the H.P. Draw its projections.	5	4	4	2
15. a)	Draw isometric scale and find isometric length of 50, 60 and 80mm.	3	2	5	1
b)	A cube of 30mm sides is resting centrally on a cube of 50mm sides. Draw the isometric view of the combined solids.	5	3	5	2
16. a)	Draw a regular hexagon of 25mm side.	4	2	1	2
b)	The following diagram presents projections of points A, B, C, D. Describe the positions of points in words with respect to principle planes	4	4	2	2
17.	Answer any <i>two</i> of the following:				
a)	A plate having shape of an isosceles triangle, has base 50 mm long and altitude 70 mm. It is so placed that in the front view it is seen as an equilateral triangle of 50 mm sides and one side perpendicular to reference line xy. Draw its projections and determine the inclination of plane with V.P.	4	4	3	2
b)	Draw the projections of a square pyramid having one of its triangular faces in the V.P. and the axis parallel to and 40 mm above the H.P. Base 30 mm side; axis 60 mm long.	4	4	4	2
c)	Draw isometric view of a circle of 50mm considering it as (a) top view and (b) front view using four centre method.	4	2	5	2

M : Marks; L: Bloom's Taxonomy Level; CO; Course Outcome; PO: Programme Outcome

i)	Blooms Taxonomy Level – 1	20%
ii)	Blooms Taxonomy Level – 2	31%
iii)	Blooms Taxonomy Level – 3 & 4	49%

\*\*\*\*\*