		Q. Co	de:182	2805		
Reg. No. B.E / B.TECH. DEGREE EXAMINATIONS, MAY 2023 First Semester ME22101 – ENGINEERING DRAWING						A pentagonal pyramid has a base side of 30 mm It rests with its base on H.P, such that one of the to V.P. The pyramid is cut by a plane which inclined at 30° to HP. Draw the development of the pyramid.
	(Common to ME, MN, MR) (Regulation 2022)				4. (a)	A hexagonal pyramid of base side 30 mm and
TIME	C: 3 HOURS MA	X. MA	RKS:	100		base on H.P with two of its base edges perpend
COURSE	STATEMENT			RBT LEVEL		a point 25 mm above the base of the pyra
CO 1	Construct conic sections and curves and sketch the orthographic views of	lines a	s per	3		projection of the truncated pyramid.
CO 2	drawing standards. <i>Draw</i> orthographic projections of plane surfaces and simple solids positions.	in va	rious	3	(b)	A cylinder 50 mm diameter. and 70 mm axis is another of 40 mm diameter, and 70 mm axi
CO 3	<i>Draw</i> the various views of sectioned solids and develop the lateral surface	es of sin	nple	3		intersect & bisect each other. Draw the proje intersections.
CO 4	Draw isometric projections of simple solids and their combination	ns and	the	3		
CO 5	orthographic projection of the intersection of surfaces of simple solids. <i>Sketch</i> the orthographic projections of a given isometric view and vice free hand.	versa u	sing	3	5. (a)	Draw the three orthographic views for
	PART- A (5 x 16 = 80 Marks)					
		Marks	CO	RBT LEVEL		
1. (a)	Develop the involute of a circle of radius 20mm. Also draw the tangent and normal at any point on the curve.	(16)	1	3		
(b)	A line AB 70 mm long is inclined at an angle of 45° to H.P. and 30° to V.P. The point A is 20 mm above H.P. and 15 mm in front of V.P. Draw the projections of the straight line.	(16)	1	3		
2. (a)	A circular lamina of diameter 40 mm rests on one of its circumference point on H.P. The diameter containing the point is inclined at 45° to V.P. The surface of the lamina is inclined 40° to H.P. Draw its projections. (OR)	(16)	2	3		R20 100
(b)	A square pyramid of base side 40mm and axis length 70 mm is resting on HP on one of its base edge with its axis parallel to VP and inclined at 50° to HP. Draw its projections.	(16)	2	3		
3. (a)	A hexagonal pyramid of base 35 mm and axis 70 mm is resting on HP on its base with two sides of base perpendicular to VP. It is cut by a plane inclined at 45° to V.P, perpendicular to H.P and 10 mm away from the axis. Draw its top view, sectional front view and true shape of the section. (OR)	(16)	3	3		(OR)

- nal pyramid has a base side of 30 mm its base on H.P, such that one of the e pyramid is cut by a plane which 30° to HP. Draw the development o d.
- al pyramid of base side 30 mm and P with two of its base edges perpendit endicular to V.P and inclined at 25° mm above the base of the pyran of the truncated pyramid.

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al pyramid has a base side of 30 mm and axis height of 70 mm. It is base on H.P, such that one of the base edges perpendicular e pyramid is cut by a plane which bisects the axis and it is 30° to HP. Draw the development of the remaining portion of d.	(16)	3	3	
al pyramid of base side 30 mm and height 60 mm rests on its P with two of its base edges perpendicular to V.P. It is cut by a endicular to V.P and inclined at 25° to H.P, meeting the axis at mm above the base of the pyramid. Draw the isometric of the truncated pyramid.	(16)	4	3	
(OR)				
50 mm diameter. and 70 mm axis is completely penetrated by 40 mm diameter, and 70 mm axis horizontally. Both axes bisect each other. Draw the projections showing curves of is.	(16)	4	3	

three	orthographic	views	for	the	following	fig.	(16)	5	3
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(b) Draw the isometric views for the following fig. (16) 5 3





<u>PART- B (1 x 20 = 20 Marks)</u>

	Marks	CO	RBT
			LEVEL
A circus animal rides small motor bike inside a globe of 200 mm	(20)	1	3
diameter. The motor bike has the wheel of 40mm diameter. Draw the			
locus of the point on the circumference of the motor-bike for one			

locus of the point on the circumference of the motor-bike for one complete revolution.

6.

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