

Programme	: B.Tech (Mechanical)	Semester	:	FALL SEM 2021-2022
Course Title	: ENGINEERING DESIGN VISUALIZATION	Code	:	BMEE102P
Faculty	: Dr G Venkatachalam	Class Nbr	:	CH2021221700751
Date of Exam	: 10/Jan/2022	Slot	:	L31+L32+L49+L50
		Max. Marks	:	40

Part A - Answer any 2 questions – (2 x 10 = 20 marks)

1. Line AB is “50” mm long. It is inclined to both $[45^\circ]$ HP & $[20^\circ]$ VP. End A is 10 mm above HP and 15 mm in front of VP.
2. Draw the projection of a solid cone of 40mm radius and 60mm height and one of the generators of the cone is resting on HP such that its axis is parallel to VP. [Use **(only) 2D option in solidworks**]
3. A cone of 30 mm diameter and 50 mm height rests on HP. It is cut by a plane perpendicular to VP and 45° inclined with HP. The cutting plane passes through the axis at a distance of 30 mm from the base. Draw the Front view, Sectional Top view and true shape of section. [Use **(only) 2D option in solidworks**]

Part B - Answer any 2 questions – (2 x 10 = 20 marks)

4. A hexagonal prism of side of base 35 mm and 55 mm axis height rests on HP. It is cut by a plane perpendicular to VP and 40° inclined with HP. The cutting plane passes through the axis at a distance of 35 mm from the base. Draw development of lateral surface of truncated prism.
5. A hexagonal prism. 30 mm base side & 55 mm axis is lying on HP. Draw its isometric projection. [Use **(only) 2D option in solidworks**].
6. A triangular pyramid of 30 mm base sides and 50 mm long axis, is centrally placed on the top of a cube of 50 mm long edges. [Use **3D option in solidworks**].