Roll No.	1	6	0	2	-	2	1	-	7	3	3	-			

	VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS-CBCS) DEPARTMENT OF MECHANICAL ENGINEERING **B.E. I – SEMESTER, 2021-22**	**CSE-A**
SHEET # 6	**UI21ES030CE :: BASIC ENGINEERING DRAWING** **PROJECTION OF SOLIDS-I (PRISMS AND CYLINDER)**	

6.1	Draw the *projections* of a **square prism** of side *40 mm* and axis *70 mm* long, having its base on the HP, a side of the base inclined at *30º* to the VP and the axis *50 mm* in front of the VP.
6.2	A **pentagonal prism** of base side *40 mm* and axis *65 mm* long has a rectangular face parallel to and *10 mm above* the HP, axis perpendicular to the VP with one base on the VP. Draw the *projections*.
6.3	Draw the *projections* of a **cylinder** of *50 mm* diameter and axis *70 mm* long and perpendicular to the VP and *40 mm above* the HP, one base *20 mm in front* of the VP.
6.4	A **Cube** of 50 mm long edges is resting on the HP with its vertical faces equally inclined to the VP. Draw its projections.
6.5	A **Hexagonal prism** has one of its rectangular faces parallel to the HP. Its axis perpendicular to the VP and 35 mm above HP. Draw the *projections*.
6.6	A **square prism** of base *40 mm* side and height *65 mm* resting on a base edge has its axis inclined at *45°* to the HP. Draw its *projections*.
6.7	A **pentagonal prism** of base edge 35 mm and axis 65 mm long lies on the VP on a longer edge and the axis inclined at 30º to the HP. Draw the projections of the solid.
6.8	Draw the projections of a **pentagonal prism** with base side of 25 mm and axis 50 mm long, resting on one of its rectangular faces on HP and with the axis inclined at *45°* to the VP
6.9	A **pentagonal prism** of base 35 *mm* and axis 65 *mm* long rests on the HP on one of the corners of the base. The longer edge containing that corner is inclined at *45°* to the HP. Draw the *projections* of the solid.
6.10	A **hexagonal prism** of base edge 35 mm and axis 65 mm long lies on the HP on a rectangular face with the axis inclined at 45º with the VP. Draw the projections of the solid.
6.11	A **hexagonal prism** of base *30 mm* and axis 50 *mm* long has an edge of the base on HP. Its axis makes an angle of *60°* with the HP and parallel to VP. Draw its *projections*.
6.12	Draw the *projections* of a **cylinder** of *50 mm* diameter and *65 mm* long, lying on the ground with its axis inclined at *30°* to the VP and *parallel* to the ground.

Source: Engineering Drawing, **N.D. Bhatt**