- 1. A hexagonal prism edge of base 25 mm and axis 60 mm long rest on H.P. on a edge of base, with that edge perpendicular to V.P. and axis inclined at 45 <sup>0</sup> to H.P. and parallel to V.P. Draw F.V and V.P.
- 2. A hexagonal prism edge of base 30 mm and axis 70 mm long rest on H.P. on a edge of base, with that edge perpendicular to V.P. and axis inclined at 45 <sup>0</sup> to H.P. and parallel to V.P. Draw F.V and V.P.
- 3. A square pyramid side of base 30 mm and axis 50 mm long is resting on one of its triangular faces on H.P. such that the axis is parallel to VP and 50 mm in front of V.P. Draw three views.
- **4.** A square pyramid side of base 40 mm and axis 60 mm long is resting on one of its triangular faces on H.P. such that the axis is parallel to VP and 40 mm in front of V.P. Draw three views.
- 5. A cylinder of 55 mm dia. And 70 mm long has its axis vertical. It is cut by a section plane perpendicular to V.P. inclined at 45 <sup>0</sup> to H.P. and intersecting the axis 40 mm . above the base. Draw front view , sectional Top view, Sectional side view and true shape of the section.
- 6. A cylinder of 45 mm dia. And 60 mm long has its axis vertical. It is cut by a section plane perpendicular to V.P. inclined at 55<sup>°</sup> to H.P. and intersecting the axis 40 mm . above the base. Draw front view , sectional Top view, Sectional side view and true shape of the section.
- 7. A cube of 60 mm. long edge has its vertical faces equally inclined to VP. It is cut by a section plane perpendicular to VP. So that true shape of section is regular hexagon. Determine the inclination of cutting plane with HP. And draw sectional TV and True shape of the section.
- 8. 4. A cube of 50 mm. long edge has its vertical faces equally inclined to VP. It is cut by a section plane perpendicular to VP. So that true shape of section is regular hexagon. Determine the inclination of cutting plane with HP. And draw sectional TV and True shape of the section.
- 9. a square prism with side of base 50 mm and axis height 80 mm is resting on its base on HP. With all vertical faces equally inclined to VP. A hole of 60 mm Dia is drilled centrally through it. The axis of hole bisects the axis of the prism at right angle and is perpendicular to VP. Draw the Development of lateral surface of prism.
- 10. a square prism with side of base 50 mm and axis height 70 mm is resting on its base on HP. With all vertical faces equally inclined to VP. A hole of 50 mm Dia is drilled centrally through it. The axis of hole bisects the axis of the prism at right angle and is perpendicular to VP. Draw the Development of lateral surface of prism.

- 11. A cylinder of diameter of base 60 mm and height of axis 90 mm is resting on its base on the HP. A square hole of 30 mm is drilled centrally through it. The axis of hole bisects the axis of the cylinder at right angle and is perpendicular to VP. Faces of the hole are equally inclined to HP. Draw the Development of lateral surface of the cylinder.
- 12. A cylinder of diameter of base 50 mm and height of axis 80 mm is resting on its base on the HP. A square hole of 35 mm is drilled centrally through it. The axis of hole bisects the axis of the cylinder at right angle and is perpendicular to VP. Faces of the hole are equally inclined to HP. Draw the Development of lateral surface of the cylinder.
- 13. A cylinder of 60 mm dia. And 80 mm long has its axis vertical. It is cut by a section plane perpendicular to V.P. inclined at 30 <sup>0</sup> to H.P. and intersecting the axis 40 mm . above the base. Draw cfront view , sectional Top view, Sectional side view and true shape of the section.
- 14. A hexagonal pyramid side of base 30 mm and and axis 50 mm long is resting on one of its triangular faces on H.P. such that the axis is parallel to VP and 45 mm in front of V.P. Draw three views.
- **15.** A pentagonal prism edge of base 30 mm and axis 70 mm long rest on H.P. on a edge of base, with that edge perpendicular to V.P. and axis inclined at 45 <sup>0</sup> to H.P. and parallel to V.P. Draw F.V and V.P.
- 16. A cone of 55 mm dia. And 70 mm long has its axis vertical. It is cut by a section plane perpendicular to V.P. inclined at 45 <sup>0</sup> to H.P. and intersecting the axis 40 mm . above the base. Draw front view , sectional Top view, Sectional side view and true shape of the section.
- 17. A square prism edge of base 25 mm and axis 60 mm long rest on H.P. on a edge of base, with that edge perpendicular to V.P. and axis inclined at 45 <sup>0</sup> to H.P. and parallel to V.P. Draw F.V and V.P.
- 18. A cylinder with radius 30 mm and and axis 50 mm long is resting on one of its triangular faces on H.P. such that the axis is parallel to VP and 50 mm in front of V.P. Draw three views.

19. A cube of 45 mm. long edge has its vertical faces equally inclined to VP. It is cut by a section plane perpendicular to VP. So that true shape of section is regular hexagon. Determine the inclination of cutting plane with HP. And draw sectional TV and True shape of the section.