ASSIGNMENT

Q1. A Cylinder of 27 mm base diameter and 50 mm height having its axis perpendicular to H.P. is kept centrally over a hexagonal slab of 27 mm base edges and 20 mm height, having two of its rectangular faces parallel to V.P. Draw an isometric projection of the combination. Keep their common axis vertical.

Q2. A Cylinder of base diameter 30 mm and length 45 mm having its axis parallel to H.P. is kept centrally over a rectangular face of the square Prism base edges 30 mm, length 60 mm, two of its rectangular faces parallel to H.P. Square base of the prism is facing towards left and circular face of the cylinder towards right. Draw an isometric projection of the combination.

Q3. An equilateral triangular Prism base edges=30 mm, length=36 mm, lying on rectangular face centrally over the top circular face of the disc of base diameter=56 mm and height=20 mm. Draw an isometric projection of the combination.

Q4. A hexagonal pyramid base edges=20 mm, height=45 mm, having its axis vertical and two of its base edges parallel to V.P., is standing vertically over the top face of equilateral triangular Prism of base edges=76 mm and height=15 mm, having one of its rectangular face parallel to V.P. Draw an isometric projection of the combination of solid.

Q5. A hexagonal Prism base edges=25 mm, length=50 mm, lying on the ground on its rectangular face with axis parallel to H.P. A Frustum of Cone, base diameter 40 mm, top face diameter 20 mm and height 60 mm, standing vertically over the rectangular face of the prism. Draw an isometric projection of the combination of solids.

Q6. A Frustum of Cone base diameter 14 mm, top diameter 28 mm and height 44 mm, resting vertically over the top face of a Frustum of hexagonal Pyramid, base edges 30 mm, top edges 20 mm and height 22 mm having two of its base edges parallel to V.P. Draw an isometric projection of the combination of solids having their common axis vertical.

Q7. A Hemi-sphere of 50 mm diameter is placed centrally on top of a right regular Hexagonal Prism of height 70 mm and base edge 20 mm. The prism stands with its axis vertical. Draw an isometric projection of the combination.

Q8 A right regular hexagonal pyramid of 30 mm base edges and 90 mm height, with one edge of its base parallel to V.P., is placed centrally on a solid circular disc of 100 mm base diameter and 30 mm thickness. The axis of the two solid coincide and are vertical. Draw its isometric projection.

Q9 A Sphere of 40 mm diameter, rests centrally on the top smaller end of a frustum of a Hexagonal Pyramid. The frustum of the Pyramid is of 25 mm sides at top and 40 mm sides at the base and 75 mm long. Two edges of the hexagonal base are parallel to V.P. Draw the isometric projection of the combination of solids.

Q10. A Triangular Prism of sides 30 mm each, and height 30 mm is having one rectangular face parallel to V.P. It is centrally placed on the flat face of a frustum of a cone, having diameter of top face 55 mm, diameter of bottom face 35 mm and height 40 mm. The common axis is perpendicular to H.P. Draw the isometric Projection.

Q11. A right regular Pentagonal Prism, edge of the base 20 mm and 45 mm long, is placed on one of its rectangular faces over a cylindrical block of 80 mm diameter and 20 mm thick, which stands on a

flat end in H.P. The axis of the Prism is perpendicular to V.P. and the Prism is resting centrally over the Cylindrical block. Draw the isometric Projection of these solids and give all dimensions.

Q12. A regular Hexagonal Prism of 30 mm sides and 70 mm height is mounted centrally on top of a circular disc of 80 mm diameter and 50 mm height, one of the side faces of the prism is parallel to the Vertical Plane. Draw the isometric projection and show all dimensions on the drawing.

Q13. A regular Hexagonal Prism of 20 mm base sides and 45 mm height is having a base side parallel to V.P. It is centrally paced on the frustum of a square pyramid having top edges 60 mm, bottom edges 36 mm and height 55 mm with a base side parallel to V.P. and their common axis perpendicular to H.P. Draw its isometric projection. Give all dimensions.

Q14 A hemi-sphere of 80 mm diameter is resting on its curved surface on H.P. and its flat circular face, facing upwards being horizontal. A frustum of a regular hexagonal pyramid of base edges 26 mm, top sides 14 mm and height 60 mm, with two of its edges parallel to V.P. rests centrally on it. Their common axis being vertical . Draw its isometric projection.