



(1)



(2)















(4)



Fig. 5.6. 5.6. Figures show various machine components to a scale of 1 : 5. Dimension the components.

67.1 Isometric sketches are shown in Prob. 6.7.1 to 6.7.24. The sketches are to drawn to a scale of 1:2. Sketch three views of each. To save time, students 6.7.24. are advised to put dimensions on the sketches for 4 or 5 cases.

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Prob. 6.7.1 to 6.7.24

## FUNDAMENTALS OF ENGINEERING DRAWING

6.13. A truncated hexagonal pyramid 36 mm high, 28 mm base side, 18 mm top sides is placed vertically with one side of the base parallel to V. A regular pentagonal prism of 20 mm sides, 40 mm long is centrally placed with one of its rectangular faces on the top of the truncated pyramid. The axis of the prism makes an angle of 30° with V. (Hint : Method is shown with a truncated cone and a pentagonal prism.)



Hint for Prob. 6.13

- 6.14. Two spheres of diameters 40 and 20 mm are placed touching each other such that the line joining the centres makes (i) an angle of 30° with H and parallel to V, (ii) an angle of 30° with H and 45° with V.
- 6.15. A 40 mm long, 16 mm dia. cylinder, a 28 mm dia. sphere and a cone of base diameter 22 mm, 40 mm high are placed on the same horizontal plane touching each other. The cylinder axis is perpendicular to P-plane while the cone is vertical. One of the end faces of the cylinder and the axis of the cone are co-planer. The cylinder rests in front of the sphere and the cone.