CE

Maximum Time: 180 Minutes   **Maximum Marks: 100**

Instructions

- Read the questions carefully before answering.
- Drawing should be only on one side of the page.
- Solution of each question should be demarked by thick continuous lines.
- Top most (main title sheet) should have border line, standard sized title block and write your name and roll number and other details clearly in it.
- All sheets should have border lines only.

Questions

1. A 60 mm diameter spherical paper weight has a 45 mm diameter flat base. It is placed on HP such that its flat base is perpendicular to HP and inclined to VP at 30°. Draw its projections. **(20)**

2. A right circular cone of base diameter 30 mm and height of 40 mm rest centrally on top of square block of 50 mm side and 25 mm thick. Draw the isometric projection of the combined solid. (*Hint: One can draw the isometric projection without drawing the plan and the elevation*) **(20)**

3. Draw the development of all the surfaces of a hexagonal pyramid of side 25 mm and height 60 mm, which is cut by a plane passing through the midpoint of the axis. The plane is inclined at an angle of 30° to the HP. The pyramid is kept on the HP with one of its hexagonal side parallel to the XY line. **(25)**

4. Draw the missing LSV and isometric view using the views given in the figure below. **(35)**