Department of Mechanical Engineering

ASSIGNMENT – 7

Isometric Projections

Department	**: Mechanical Engineering**	**Semester**	**: 1st Semester A**
Subject Name	**: Engineering Visualization**	**Subject code:**	**: 21EV15**
Maximum marks	**: 10**	**Publication Date**	**: 28/03/2022**
Staff In-charge	**: Dr. Raghavendra Reddy N V**	**Submission Date**	**: 05/04/2022**

Instructions

- Write your Name, Class, Section, USN/Roll number and assignment number in the all the sheets.
- All the problems using software.
- Answer neatly and legibly in A4 size grid sheets / white sheets.
- An incomplete assignment is NOT acceptable for submission.

Sl.	Assignment Questions
1	A cone of base diameter 30 mm and height 40 mm rests centrally over a cube of side 50 mm. Draw the isometric projections of the combination of solid.
2	A frustum of cone base diameter 50 mm, top face diameter 25 mm and height 50 mm is placed centrally on a square slab side 80 mm and thickness 30 mm. Draw the isometric projections of the combination of solid.
3	A sphere of diameter 50 mm rests centrally on top of a cube of sides 50 mm. Draw the isometric projections of the combination of solid.
4	Draw the isometric projection of a rectangular prism of 60 x 80 x 20 mm thick surmounting a tetrahedron of sides 45 mm such that the axes of the solids are collinear and at least one of the edges of both the sides are parallel to VP
5	A square prism base side 40 mm, height 50 mm is placed centrally on a cylinder slab of diameter 100 mm and thickness 30 mm. Draw the isometric projections of the combination of solid.
6	A sphere diameter 40 mm is placed centrally on the flat face of a hemisphere diameter 60 mm. Draw the isometric projections of the combination of solid.
7	A hemisphere diameter 50 mm is resting on its curved surface centrally on the top face of frustum of a rectangular pyramid base 80 mm x 60 mm and top face 60 mm x 40 mm, height 55 mm. Draw the isometric projections of the combination of solid
8	A square prism base side 40 mm, height 50 mm is placed centrally on a rectangular slab of base sides 100 mm x 60 mm and thickness 20 mm. Draw the isometric projections of the combination of solid.