Lukhdhirji Engineering College, Morbi

Department of Mechanical Engineering **Sem.:** 6th Sem.

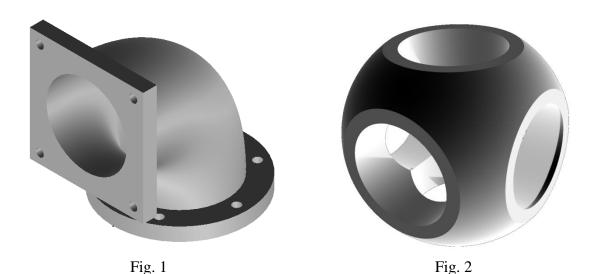
Subject: CAD (3161903) Sem.: 6th Sem. Year: 2023-24

Assignment 3 Mathematical Representation of Solids_CO2

- 1. List various approaches used for creating solid models. Discuss about Constructive solid modeling (C-Rep) and Boundary representation (B-Rep) approaches.
- 2. What is feature based modeling? Discuss various steps involved in creation of models using features.
- 3. Discuss the Boolean operation in CSG.
- 4. Explain wireframe modeling in detail. Compare it with solid modeling.

5*. Prepare CSG tree of Fig. 1 and Fig. 2.

^{*} Challenge question (It is not compulsory for all)



Learning Questions (No need to write):

- 5. Compare wireframe, surface and solid modeling techniques.
- 6. What do you understand by geometry and topology in solid modeling?

Vision of the Department:

To deliver quality engineering education for Mechanical Engineers with Professional competency, Human values and Acceptability in the society.

Mission of the Department:

- To nurture engineers with basic and advance mechanical engineering concepts
- To impart Techno-Managerial skill in students to meet global engineering challenges
- To create ethical engineers who can contribute for sustainable development of society