## BITS Pilani, K K Birla Goa Campus

SECOND SEMESTER 2022-2023

## **CHE F419 Chemical Process Technology**

## Comprehensive Examination (Closed Book) PART - A

DATE: 13/05/2023 Time: 10:00 – 12:00 (noon) Maximum Marks: 40

## **Instructions:**

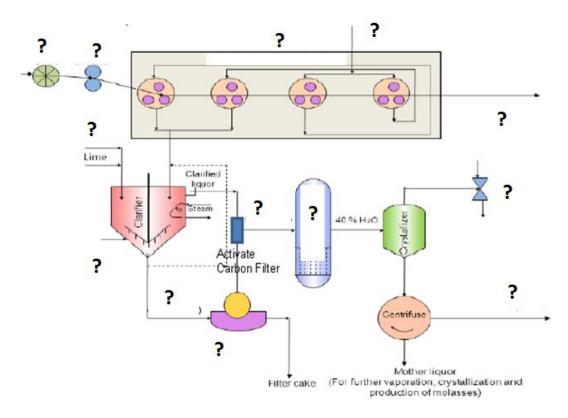
- All parts of a question must be answered at a single place.
- Support your answer with neat sketches and chemical reactions where ever necessary
- 1. Write the chemical reaction for the following processes (reaction conditions if any).

[3+4+3=10 M]

- a. The reactions involved in the production of Isopropanol.
- b. Reactions involved in the Steam Cracking of Petroleum Hydrocarbons.
- c. The side reactions involved in the manufacture of Methanol.
- 2. How are Ammonia synthesis reactors classified?

[5 M]

- 3. Describe process technology for the manufacture of Formaldehyde.
- [11 M]
- 4. Identify the following manufacturing process and mention the missing components on the flow sheet for the manufacture of the same as a, b, c and so on. [14 M]



\*\*\*\*\*\*\*\*\*\*\*\*\*\*