## 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).

$$
[3+4+3=10 \mathrm{M}]
$$

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?
3. Describe process technology for the manufacture of Formaldehyde.
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.


