

BITS Pilani, K K Birla Goa Campus
SECOND SEMESTER 2022-2023
CHE F419 Chemical Process Technology
MidSemester Exam (Closed Book)

DATE: 14/03/2023

Time: 09:00 – 10:30 AM

Maximum Marks: 60

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).
[6 + 4 + 4 = 14 M]
 - a. The reactions involved in ammonia absorption and carbonation of Solvay Process.
 - b. The reactions involved in the manufacture of Nitric acid.
 - c. The reactions involved in the Claus Process.
2. Provide the process flow sheet for manufacture of purified 85% phosphoric acid.
[15 M]
3. Discuss and provide a neat sketch on the Superphosphate Den.
[10 M]
4. What is the name of the process for production of sulphuric acid and discuss on the process along with thermodynamic and kinetics considerations.
[10 M]
5. Identify the process and Discuss about the process technology of the same.
[11 M]


