

Printed Pages : 2



ECH404

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 151408

Roll No.

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B. Tech.

(SEM. IV) THEORY EXAMINATION 2014-15
CHEMICAL TECHNOLOGY - I

Time : 2 Hours]

[Total Marks : 50

Note: Attempt ALL questions. Assume suitable data, if required.

1 Attempt any **FOUR** parts of the following: - **3x4**

- (a) Differentiate between soap and detergent.
- (b) Write a short note on edible oils with the help of suitable example.
- (c) Differentiate between unit operations and unit processes with the help of suitable examples.
- (d) Differentiate between rubber and plastics.
- (e) Explain the manufacturing of citric acids.
- (f) Describe the process of manufacture acetic acid by fermentation process.

- 2 Attempt any **TWO** parts of the following: - **6x2**
- (a) Explain the process of Fluid Catalytic cracking with suitable diagrams.
 - (b) Describe the continuous process of sugar manufacturing with the help of neat flow diagram.
 - (c) What are the antibiotics? Discuss the manufacturing process of antibiotics with neat diagram with their suitable examples.
- 3 Attempt any **TWO** parts of the following: - **7x2**
- (a) Explain the manufacturing process of Nylon with neat flow diagram with the chemical reaction involved during the process.
 - (d) Explain the process of manufacturing of Formaldehyde with suitable diagrams and required reactions.
 - (c) Draw and explain the neat sketch for the preparation of polyethylene. Also discuss the chemical reactions and major engineering problems associated with this process.
- 4 Write short notes on any **FOUR** of the following: - **3x4**
- (a) Viscose rayon
 - (b) Polyester
 - (c) Alkylation
 - (d) Ethanol amine
 - (e) Lube oil manufacturing
 - (f) Vulcanization