

Shree Manibhai Virani and Smt. Navalben Virani Science College (Autonomous), Rajkot
Affiliated to Saurashtra University, Rajkot

SEMESTER END EXAMINATION NOVEMBER - 2017

M.Sc. Industrial Chemistry

16PICDC01 – CHEMICAL TECHNOLOGY-1

Duration of Exam – 3 hrs

Semester – III

Max. Marks – 70

Part A (5x2= 10 marks)

Answer **ALL** questions

1. What is analgesic drug? Enlist four analgesic drugs.
2. What is antimalarial drug? Enlist four antimalarial drugs.
3. Give the structure of Nicotine and state its any two applications.
4. Define: Ingrain azo dyes and give two example of it.
5. What is non-destructive testing?

Part B (5x5 = 25 marks)

Answer **ALL** questions

- 6a. Explain synthesis of Ketoprofen in detail.

OR

- 6b. Explain synthesis of Naproxen in detail.

- 7a. Explain synthesis of Pyrimethamin in detail.

OR

- 7b. Explain malarial life cycle in detail.

- 8a. Write a detailed note on extraction of Azadirachta Indica and explain its uses.

OR

- 8b. Explain sources, constituents and uses of essential oils in detail.

- 9a. Define: Reactive dyes and give the synthesis of Procion Blue HB

OR

- 9b. Give synthesis of i) Methyl orange III ii) Direct Blue 2B

- 10a. Explain Radiographic method for non-destructive testing of material.

OR

- 10b. Write a short note on heat treatment theory.

Part C (5x7 = 35 marks)

Answer **ALL** questions

11a. Explain synthesis of Ethionamide in detail.

OR

11b. Explain detailed synthesis of Amino-3-acetoxy cephalosporinic acid.

12a. Explain types of Diabetes in detail.

OR

12b. Explain synthesis of Chloroquine in detail.

13a. Write a detailed note on extraction of Citric acid.

OR

13b. Write a detailed note on extraction of Nicotine.

14a. Explain: Azo dyes with mechanism and give synthesis of i) Direct Violet N ii) Bismark Brown MR

OR

14b. Discuss Anthraquinone VAT dyes with mechanism and give synthesis of i) I Blue 4 ii) Golden Yellow IGK

15a. Write a detailed note on heat treatment stages.

OR

15b. Write a detailed note on the i) liquid penetrate and ii) Eddy current method for non-destructive testing of material.
