Enrollment No. _____

Shree Manibhai Virani and Smt. Navalben Virani Science College (Autonomous), Rajkot

Affiliated to Saurashtra University, Rajkot

SEMESTER END EXAMINATION NOVEMBER 2018

B.Sc. Industrial Chemistry

16UICDC01 – PETROLEUM & PETROCHEMICALS

Duration of Exam – 3 hrs ***Semester – V*** ***Max. Marks – 70***

Part A (10x1= 10 marks)

Answer **ALL** questions

1. Define : i) Deflagration ii) Petroleum
2. Enlist classification of Crude Oil.
3. Enlist different type of methods available for petroleum analysis.
4. Which types of detectors & films are used into ASTM D 4294 method?
5. Write the chemical reaction to produce CS2.
6. Enlist the usage of HCN.
7. What is the boiling point of 2-Propanol? Write usage also.
8. Write main chemical reaction to produce Cumene.
9. What is the usage adipic acid?
10. Write any two reactions of steam reforming to produce SNG.

Part B (5x5= 25 marks)

Answer **ALL** questions

11a. Give the brief introduction about refining.

OR

11b. Explain desalting process in detail.

12a. Give brief introduction about sampling procedure.

OR

12b. Describe “Accuracy and Precision” in petroleum analysis.

13a. Explain production of ethylene oxide in detail.

OR

13b. Describe ethylene glycol manufacturing process with diagram.

14a. Describe propylene oxide manufacturing process with diagram.

OR

14b. Explain production of Acrylonitrile in detail.

15a. Explain production of LABs in detail.

OR

15b. Explain steam reforming from natural gas with schematic diagram

***Part C** (5x7= 35 marks)*
Answer **ALL** questions

16a. Explain Preparation for processing of crude oil by equipment.

OR

16b. Write the short note on Gasoline, Jet-fuel, Diesel & Lubricants.

17a. Explain ASTM D 4007 in detail.

OR

17b. Explain ASTM D 1298 in detail.

18a. Explain production of methanol in detail.

OR

18b. Describe acetylene manufacturing process with diagram.

19a. Describe styrene manufacturing process with diagram.

OR

19b. Explain production of glycerol in detail.

20a. Explain SNG production via partial oxidation.

OR

20b. Explain production of Caprolectum in detail.