

PARUL UNIVERSITY
PARUL INSTITUTE OF APPLIED SCIENCES
MID SEMESTER REMEDIAL EXAMINATION, MARCH 2020
B.Sc. Chemistry Semester 6

Paper Name: Industrial Chemistry-II

Date: 19/03/2020

Paper Code: 11105354

Time: 45 min.

Max. Marks: 20

Instructions:

1. All questions are compulsory and options are given in first and second question only.
 2. Numbers to the right of question indicate the marks of respective question.
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Q. 1 Do as directed (Attempt Any One). **(04)**

- a. Draw the block diagram of Extraction and explain
- b. Draw the diagram of Coke Combustion Method for CO₂ manufacturing.

Q. 2 Attempt any *three* questions of the following. (Each question carries *TWO* mark) **(06)**

- a. Give difference between absorption and adsorption
- b. Give different types of Pump
- c. Give different types of Heat Exchangers
- d. Give uses of Hydrogen gas.

Q. 3 Do as directed. Attempt *all* five questions. (Each question carries *ONE* mark) **(05)**

- a. Define Distillation
- b. Define Extraction
- c. Give Scope of Reactors
- d. Define Scale up
- e. Give types of Emulsion

Q. 4 Multiple choice questions. (Write Correct Option). (Each question carries *ONE* mark) **(05)**

1 Chemical Structure of Nitrolium

- | | |
|---|---|
| (A) [Ca ²⁺] [⁻ N=C=N ⁻] | (B) [Cu ²⁺] [⁻ N=C=N ⁻] |
| (C) [Cu ²⁺] [⁻ N=O=N ⁻] | (D) [Ca ²⁺] [⁻ NH=C=NH ⁻] |

2 Boiling point of Toluene which is helpful in distillation.

- | | |
|---------|---------|
| (A) 115 | (B) 110 |
| (C) 125 | (D) 105 |

3 Tray Dryer is a _____

- | | |
|-----------------|----------------------|
| (A) Equal Dryer | (B) Continuous Dryer |
| (C) Steam Dryer | (D) Batch Dryer |

4 Pilot Scale is used for

- | | |
|--------------|----------------|
| (A) Up Scale | (B) Down Scale |
| (C) Scale Up | (D) Scale Down |

5 Which liquefied gas is used for artificial rain?

- | | |
|---------------------|---------------------|
| (A) CO ₂ | (B) NO ₂ |
| (C) H ₂ | (D) SO ₂ |

-- End of Paper--