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## Fourth Semester B.E. Degree Examination, June/July 2023 Chemical Technology – II

Time: 3 hrs.

Max. Marks: 100

**Note: Answer any FIVE full questions, choosing ONE full question from each module.**

### Module-1

- 1 a. With a neat flow diagram, explain the extraction and purification of vegetable oils. (12 Marks)
- b. Describe different types and waxes, with their applications. (08 Marks)

**OR**

- 2 a. Explain the production of heavy detergents. (12 Marks)
- b. Explain the classification and cleaning compounds. (08 Marks)

### Module-2

- 3 a. Explain extraction of sucrose from cane sugar with major engg. Problems. (12 Marks)
- b. Write a note on chemistry of starches and its applications. (08 Marks)

**OR**

- 4 a. With a flow diagram, explain the manufacture of ethanol by fermentation. (14 Marks)
- b. Discuss on Beer. (06 Marks)

### Module-3

- 5 a. Explain composition and classification of crudes. (08 Marks)
- b. Explain the petroleum reforming with fractions. (12 Marks)

**OR**

- 6 a. Describe the LPG and LNG production. (10 Marks)
- b. Describe the petrochemicals from methane. (10 Marks)

### Module-4

- 7 a. Explain composition and classification and coals. (10 Marks)
- b. Explain the distillative distillation of coal. (10 Marks)

**OR**

- 8 With neat flow diagram, discuss in detail the production of wood pulp by kraft process. Identifying the major engineering problems involved in the process. (20 Marks)

### Module-5

- 9 a. Explain the stages in polymerization. (08 Marks)
- b. Explain the production and applications of PVC. (12 Marks)

**OR**

- 10 a. Discuss about Natural and synthetic rubber. (10 Marks)
- b. Discuss rubber compounding with advantages. (10 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.