

Unit IV

8. (a) What are the different types of air pollutants ? Explain air pollution. 7
(b) Explain radiation pollution in detail. 7
9. (a) Explain various processes of treatment of pollution and waste created from industries. 8
(b) Explain noise pollution in detail. 6

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Roll No.

(07/21-II)

10301

M. Sc. EXAMINATION

(For Batch 2017 & Onwards)

(Fourth Semester)

CHEMISTRY

CHIC(S)-406

Industrial Chemistry

Time : Three Hours

Maximum Marks : 70

Note : Attempt Five questions in all, selecting one question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

1. (a) Give preparation and applications of sulphuric acid.
- (b) What are two major advantages of dimethyl terephthalate over terephthalic acid ?

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- (c) What are herbicides ? Give two examples.
 - (d) Define UV-stabilizers giving examples.
 - (e) What is synthesis gas ? How is it produced ?
 - (f) List major water pollutants.
 - (g) What is Nylon ? Give its preparation.
- 2×7=14

Unit I

- 2. (a) Explain the process of caustic soda formation. Give its industrial importance. 7
- (b) Give the preparation of the following polymers and also discuss their properties which make them industrially important : 7
 - (i) Polyesters
 - (ii) Acetal resins.
- 3. (a) How is polypropylene prepared ? Give its various applications as well. 7

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- (b) What are floropolymers ? Give their synthesis and applications. 7

Unit II

- 4. (a) What are flame retardants ? Give their types with examples and structures. 7
- (b) What are blends ? How do these vary the properties of polymers ? Explain by giving one example. 7

- 5. (a) What are Agrochemicals ? Explain Fertilizers. 7
- (b) Write briefly about insecticides giving structures of important insecticides. 7

Unit III

- 6. (a) Explain various refinery and petrochemical operations. 7
- (b) Write a note on cracking processes. 7

- 7. (a) What are C₁ products ? Explain formic acid and chloromethane in detail. 7
- (b) Write a note on acetic acid production. 7

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