

2055  
Bachelor of Science (FYUP) Second Semester  
Industrial Chemistry  
Applied Industrial Chemistry

Time allowed: 3 Hours

Max. Marks: 60

**NOTE:** Attempt five questions in all, including Question No. 1 which is compulsory and selecting one question from each Unit.

X-X-X

- Q. 1. (a) Differentiate between oils and fats.  
(b) Give a brief of raw materials used in pulp & paper.  
(c) Explain the constituents of cement and refractory material.  
(d) Write three desirable properties of face powder.

(4 × 3 = 12)

UNIT-I

- Q. 2. (a) Describe the extraction of oils from vegetable oils using more appropriate method.  
(b) Illustrate the manufacturing of soap.
- Q. 3. (a) What is hydrogenation of oils? Discuss the procedure of it.  
(b) Elaborate the classification of detergents.

(6, 6)

(6, 6)

UNIT-II

- Q. 4. (a) Discuss the different types of pulp.  
(b) List the uses of molasses and bagasse.

(6, 6)

- Q. 5. Explain the following in sugar extraction:

(i) Defecation      (ii) Carbonation      (iii) Concentration      (iv) Crystallization

(12)

UNIT-III

- Q. 6. (a) What is Portland cement? How will you manufacture it?  
(b) Describe the properties of ceramics.

(6, 6)

- Q. 7. (a) Elaborate types of cement with examples.  
(b) Discuss the important steps involved in the manufacture of refractories.

(6, 6)

UNIT-IV

- Q. 8. (a) List the important ingredients of a shaving cream.  
(b) What is shampoo? Explain ideal properties of a shampoo.
- Q. 9. (a) What is hair dye? Discuss the types of hair dyes.  
(b) Explain the sources and importance of Geraniol and Rose oil in cosmetic industry.

(6, 6)

(6, 6)

X-X-X