

Roll No.

94145

**B. Sc. (Hons.) Chemistry 6th Semester
Examination – May, 2024**

ORGANIC CHEMISTRY – I

Paper : CH(H)-605

Time : Three Hours]

[Maximum Marks : 40

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt *five* questions in all, selecting *one* question from each Section. Question No. 1 is *compulsory*. All questions carry equal marks.

1. (a) Can enzymes be called as polymers ?
(b) Which co-enzyme is derived from thiamine ?
(c) Which metal is used in hydrogenation of oils ?
(d) What raw materials are used for production of alcohol on large scale ?

- (c) What is chemical composition of Soaps ?
(f) What is the role of chemotherapeutic agents ?
(g) What is basic difference between antiseptic^o and disinfectant ?
(h) When should histamines be taken ? $1 \times 8 = 8$

SECTION – A

2. (a) What is function of Glycolysis in our body ?
Explain the various steps of glycolysis pathway. 4
(b) What is co-enzyme A ? Give its uses and mechanism of action. 4
3. (a) What are enzymes ? What factors affect the mechanism of catalysis ? 4
(b) Write notes on : 4
(i) Naming of Enzymes
(ii) Lipoic Acid

SECTION – B

4. (a) What do you mean by fermentation ? Differentiate between Anaerobic and aerobic fermentation. 4

(b) Explain the following :

(i) Rancidity

(ii) Acid value

(iii) Saponification

(iv) Iodine numbers

5. (a) What are hydrogenated oils ? How are they manufactured ? How they affect our health ? 4
- (b) Describe the cleansing action of detergents. Why are detergents better than soaps ? 4

SECTION - C

6. (a) How chemical structure of a drug determine its physiological properties ? Explain. 4

(b) What are Analgesics and antipyretic drugs ? What precautions should be follow before using them ? 4

7. (a) Write notes on :

(i) Mechanism of chemotherapeutic action.

(ii) Stereochemical Notation for organic chemical system. 6

(b) Explain the preparation, and uses of Ibuprofen. 2

SECTION - D

8. (a) What are sulphadruugs ? Name *two* commonly used sulpha drugs. Give their uses & side affects. 5

(b) Write composition of chloroamphenicol what precaution must be taken before using chloroamphenicol ? 3

9. (a) Describe one method of preparation of Dibutyl phthate. How does used repellent work ? 4

(b) What are Antiamoebic drugs ? Give one example. What are side effects of this drug ? 4