

(FOR THE CANDIDATES ADMITTED

23UCY612

DURING THE ACADEMIC YEAR 2023-2024 ONLY)

REG.NO. :

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI

END-OF-SEMESTER EXAMINATIONS: MAY 2026

B.SC CHEMISTRY

MAXIMUM MARKS: 75

SEMESTER VI

TIME : 3 HOURS

PART - III

ORGANIC CHEMISTRY- II

SECTION – A

(10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS.

(K1)

1. Which of the following is a linear fused tricyclic hydrocarbon?
a) Naphthalene b) Anthracene c) Phenanthrene d) Benzene
2. In Gabriel's phthalimide synthesis, the key intermediate is: _____
a) α -halo acid b) α -aminonitrile c) Potassium phthalimide d) Dinitrophenyl amino acid
3. Which nitrogen base is found in RNA but not DNA?
a) Adenine b) Thymine c) Uracil d) Guanine
4. Vitamin K is required for: _____
a) Blood clotting b) Vision c) Bone formation d) Collagen synthesis
5. Procaine is a: _____
A. General anaesthetic B. Local anaesthetic (ester type) C. Barbiturate D. Antibiotic

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES

(K2)

6. Give one industrial use of naphthalene.
7. Which method is used to determine N-terminal amino acid?
8. Give the general formula of a triglyceride.
9. What are fat soluble vitamins?
10. Define anaesthetics.

SECTION – B

(5 X 5 = 25 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.

(K3)

11. a) Render the preparation of phenanthrene.
(OR)
b) Give the properties of naphthalene.
12. a) Discuss the any five chemical properties of aminoacids.
(OR)
b) Explain the denaturation process of protein.
13. a) List the functions of nucleotides.
(OR)
b) Classify and explain lipids.

14. a) List the importance of vitamins.

(OR)

- b) Give the constitution of vitamin A1.

15. a) Define antimalarials and classify them.

(OR)

- b) Explain the mode of action of sulpha drugs.

SECTION – C

(5 X 8 = 40 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.(K4 (Or) K5)

16. a) Elucidate the structure of Anthracene.

(OR)

- b) Give the structure of aldehyde based on reactions.

17. a) Explain the primary and Secondary structure of protein.

(OR)

- b) Discuss the N-terminal end analysis by Sangers method.

18. a) Explain the following: i) Saponification value ii) Iodine value

(OR)

- b) Illustrate and explain the structure, replications and functions of DNA.

19. a) Write a note on fat soluble vitamins and their deficiency diseases.

(OR)

- b) Discuss the constitution and synthesis of riboflavin.

20. a) Classify and explain drugs.

(OR)

- b) Elaborate the structure and functions of penicillin.
