

**N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI****END-OF-SEMESTER EXAMINATIONS : MAY 2023****B.Sc. – CHEMISTRY****MAXIMUM MARKS: 70****VI SEMESTER****TIME : 3 HOURS****PART – III**  
**ORGANIC CHEMISTRY – II****SECTION - A****(10 X 1 = 10 MARKS)****ANSWER THE FOLLOWING QUESTIONS.****MULTIPLE CHOICE QUESTIONS.****(K1)**

1. When benzaldehyde and formaldehyde are heated in an aqueous NaOH solution, they produce \_\_\_\_\_.  
 a) sodium formate + benzyl alcohol      b) methanol + sodium benzoate  
 c) Methanol + benzyl alcohol      d) sodium formate + sodium benzoate
2. The protein precipitation at isoelectric pH and the obtain precipitate is called \_\_\_\_\_.  
 a) Gelatin    b) Viscosity    c) Coagulation    d) Flocculum
3. The melting point of fatty acids depends upon chain length and \_\_\_\_\_.  
 a) The shape of the fatty acids      b) The position of the double bond  
 c) Charge on the carbon      d) Degree of unsaturation
4. Carr – price reaction is used to detect \_\_\_\_\_.  
 a) Vitamin A    b) Vitamin E    c) Ascorbic acid    d) Vitamin D
5. Sulpha drugs are used for \_\_\_\_\_.  
 a) removing bacteria      b) stopping growth of bacteria  
 c) precipitating bacteria      d) decreasing the size of bacteria

**ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES.****(K2)**

6. Write any two chemical properties of Amine Compound.
7. Write the names of any two amino acids.
8. Explain the structure of thiamine
9. What is the symptoms of disease caused by deficiency of vitamin A1?
10. Describe any two uses of Procaine

**(CONTD .... 2)**

**SECTION – B****(5 X 4 = 20 MARKS)****ANSWER EITHER (a) OR (b) IN EACH OF THE  
FOLLOWING QUESTIONS.****(K3)**

11. a) Explain the chemical properties and synthesis of phenanthrene.

**(OR)**

b) Write any three chemical properties of phenol

12. a) Explain Gabriel's Phthalimide synthesis with its mechanism.

**(OR)**

b) Illustrate the classifications of proteins with example

13. a) Discuss the synthesis of Adenine and Guanine

**(OR)**

b) Discuss the structure of nucleic acids.

14. a) How will you synthesis retinol? Explain

**(OR)**

b) Classify and explain about Vitamins.

15. a) Write the structure and use of chloroquine and Primaquine.

**(OR)**

b) Discuss the structure and uses of any two broad spectrum antibiotics.

**SECTION – C****(4 X 10 = 40 MARKS)****ANSWER ANY FOUR OUT OF SIX QUESTIONS****(16<sup>th</sup> QUESTION IS COMPULSORY AND ANSWER ANY THREE****QUESTIONS (FROM Qn. No : 17 to 21)****(K4 (Or) K5)**

16. Explain N-terminal assay and C-terminal assay.

17. Elucidate The structure of naphthalene and anthracene.

18. Illustrate the functions of DNA and nucleotides

19. Discuss briefly the primary and secondary structure of proteins and its biological functions.

20. Elucidate the structure of Ascorbic acid.

21. Discuss the mode of action of sulpha drugs against the micro organism. .

\*\*\*\*\*