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| QP Code: D133966 | | Total Pages:1 | Name: |
| | | | Register No. |
| THIRD SEMESTER UG DEGREE EXAMINATION, NOVEMBER 2025 | | | |
| (CUFYUGP) | | | |
| CHE3MN 202-BIO ORGANIC CHEMISTRY | | | |
| 2024 Admission onwards | | | |
| Maximum Time :2 Hours | | | Maximum Marks :70 |
| Section A | | | |
| All Questions can be answered. Each Question carries 3 marks (Ceiling : 24 Marks) | | | |
| 1 | Why fluoroacetic acid is stronger than chloroacetic acid? | | |
| 2 | Distinguish between electrophiles and nucleophiles. | | |
| 3 | Explain electromeric effect with two examples. | | |
| 4 | Write two examples of rearrangement reactions. | | |
| 5 | Compare and explain the difference in pK _b values of ammonia, aniline and methyl amine. | | |
| 6 | What is Hoffman bromamide reaction? | | |
| 7 | Write any three reactions of benzene diazonium chloride. | | |
| 8 | Explain nucleophilic addition with three reactions of formaldehyde. | | |
| 9 | Distinguish between globular and fibrous proteins. | | |
| 10 | How amino acids are classified? | | |
| Section B | | | |
| All Questions can be answered. Each Question carries 6 marks (Ceiling : 36 Marks) | | | |
| 11 | Draw mesomeric structures of benzaldehyde and nitrobenzene. | | |
| 12 | Compare the stability of ethyl carbocation and tertiary butyl carbocations. | | |
| 13 | Write a note on formation, stability and reactions of carbanion. | | |
| 14 | Describe any two tests to distinguish glucose. | | |
| 15 | Explain the preparation of glucose from starch. | | |
| 16 | Draw the structure of a dipeptide and explain the terms peptide bond, polypeptide and proteins. | | |
| 17 | Describe the double helical structure of DNA. | | |
| 18 | How lipids are classified? | | |
| Section C | | | |
| Answer any ONE .Each Question carries 10 marks (1x10=10 Marks) | | | |
| 19 | Write two methods each for the preparation of aldehydes, ketones and carboxylic acid. | | |
| 20 | Explain the classification of carbohydrates. | | |