

QP Code: D134321		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	Compare and explain the difference in pKa values between formic acid and acetic acid.		
2	Provide examples of homolysis and heterolysis.		
3	How does hyperconjugation affect alkene stability?		
4	Distinguish between mesomeric and electromeric effects.		
5	How will you separate aldehydes from a mixture using NaHSO ₃ ?		
6	Why aldehydes undergo nucleophilic substitution faster than ketones?		
7	Write any two methods to prepare primary amines.		
8	How will you prepare benzene diazonium chloride?		
9	What is isoelectric point?		
10	Mention any three biological functions of lipids.		
Section B			
All Questions can be answered. Each Question carries 6 marks (Ceiling : 36 Marks)			
11	Draw all hyperconjugating structures Toulene.		
12	Write a note on different types of organic reactions.		
13	Compare the mesomeric effect of CHO and OH group attached to benzene.		
14	Write two examples each for reducing and non -reducing sugars.		
15	Explain Fehling's test, Tollen's test and Molisches test for glucose.		
16	Describe characteristics of enzymes.		
17	Distinguish between DNA and RNA regarding structure and function.		
18	Write any two tests to distinguish proteins.		
Section C			
Answer any ONE .Each Question carries 10 marks (1x10=10 Marks)			
19	Describe any five synthetic applications of benzene diazonium chloride.		
20	Write a note on preparation of glucose from starch, sucrose from cane juice and preparation of fructose		