

UG Odd Semester Examination, 2022**EDUCATION B.Sc. B.Ed**

(5th Semester)

Course No.: BSCH-501

(Organic Chemistry)*Full Marks: 50**Pass Marks: 20**Time: 2 hours*

*The figures in the right margin indicate full marks for the question.
Answer the following five (5) questions*

6. (a) How will you determine N-terminal amino acids? 5
(b) Write down the synthetic procedure of Guanidine. 5
7. Write a detailed note on reduction of nitro compounds under different conditions. 10

Or

8. Write down the structure of ethyl acetoacetate, diethyl malonate, cyanoethyl acetate, acetyl acetone, nitromethane. 10
9. (a) State the mechanism of Aldol condensation. 6
(b) Give two uses of LiAlH_4 and OsO_4 . 2x2=4

Or

10. Write a detailed note on Beckman rearrangement. 10

1. Discuss about E1 reaction in details. 10

Or

2. Write down the Mechanism of Reimer Tieman reaction and Claisen rearrangement? 5+5=10
3. Discuss about the details of $\text{S}_{\text{N}}2$ reaction. 10

Or

4. (a) Taking an example of your choice explain how sulphur compounds act as a neighbouring participating group. 5
(b) Write down the mechanism of Michael reaction. 5
5. Make a detailed note on essential and non-essential aminoacids. 10

Or