UNIVERSITY OF NORTH BENGAL

B.Sc. Honours Part-II Examination, 2021

BOTANY

PAPER-V (REVISED NEW SYLLABUS)

Full Marks: 70

ASSIGNMENT

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.
All symbols are of usual significance.

Answer any *five* questions from the following each within 450 words   14×5 = 70

1. Describe the process of DNA replication in prokaryotes. Differentiate between the process of prokaryotic and eukaryotic DNA replication.   14

2. Describe the ultrastructure of chromosome with special reference to nucleosome and solenoid model.   14

3. Derive Michaelis-Menten equation of enzyme-catalyzed reaction and establish the relationship between initial velocity, final velocity and substrate concentration. Write a note on the significance of Michaelis constant.   14

4. Briefly discuss about the regulation of cell cycle events with special reference to the checkpoints.   14

5. Explain why peptide bonds are rigid and planar. Give an account on classification of amino acids.   14

6. Give a short note on nuclear pore complex. Briefly describe endosymbiotic origin of chloroplasts.   14

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