



'समानो मन्त्रः समितिः समानी'

UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 3rd Semester Examination, 2023

CC6-TEA SCIENCE

Time Allotted: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

1. Answer any **five** questions from the following: 1×5 = 5
 - (a) What are glycolipids? 1
 - (b) Define apoptosis. 1
 - (c) What are the subunits of 80s ribosome? 1
 - (d) What is aneuploidy? 1
 - (e) What is the full form of FISH? 1
 - (f) What is gene frequency? 1
 - (g) Why mitochondrion is called semiautonomous? 1
 - (h) What is population? 1

2. Answer any **three** from the following: 5×3 = 15
 - (a) What is cell death? Briefly state the relation of Apoptosis with Cancer. 2+3
 - (b) What is polyploidy? Write about the origin of any polyploid plant. 2+3
 - (c) Compare Heterosis and Hybrid vigour. What are the basis of Heterosis? 2½+2½
 - (d) What is significance of plasma membrane? What are membrane carbohydrate? 3+2
 - (e) Write about the extracellular control of cell division.

3. Answer any **two** from the following: 10×2 = 20
 - (a) Describe the structure of chloroplast. 10
 - (b) Differentiate between— 5+5
 - (i) Euploidy and aneuploidy
 - (ii) Eukaryotic and Prokaryotic ribosome.
 - (c) What are the different types of structural aberrations of chromosome? 10
 - (d) What is genome? What does Hardy-Weinberg Law state? What are its limitation — Explain. 2+2+6

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