



'সমানো মন্ত্র: সমিতি: সমানী'

UNIVERSITY OF NORTH BENGAL
B.Sc. Honours 3rd Semester Examination, 2023

CC7-GEOLOGY
PALAEONTOLOGY

Time Allotted: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

1. Write short notes on any **five** of the following: 1×5 = 5
 - (a) Mould fossil
 - (b) Commensalism
 - (c) Theory of Evolution
 - (d) Proparian
 - (e) Law of Faunal Succession
 - (f) Recurrent fauna
 - (g) Pallial Sinus
 - (h) Umbo.

2. Answer any **three** questions from the following: 5×3 = 15
 - (a) Using a suitable diagram, describe the different types of Biostratigraphic zones. 5
 - (b) Using a suitable diagram, describe the method of Cladism and how it is used in classification of organisms. 5
 - (c) What is a type specimen? What are the different kinds of type specimens in palaeontology? 1+4
 - (d) While doing fieldwork in the Himalayas, you find an inarticulate brachiopod in a Himalayan rock. What conclusions can you deduce about the age of the rock, the palaeoecology and palaeoenvironment of that region? 5
 - (e) Briefly explain the importance of Edicaran fauna in palaeontology. 5

3. Answer any **two** questions from the following: 10×2 = 20
 - (a) With help of suitable examples, describe how fossils help us in knowing about the climates of the past. 10
 - (b) Using a suitable diagram, describe the different stages of ontogenic development of a trilobite. What is Ecdysis and what problem does it create while studying trilobite? 6+4
 - (c) With the help of a suitable diagram, describe the different morphological features of a typical Bivalve. Describe any 3 morphological features. How does pallial line give us information about the paleoecology of a bivalve? 4+3+3
 - (d) Using suitable diagrams, describe how fossils help in Correlation of rock strata. 10

—x—