



'সমানো মন্ত্র: সমিতি: সমানী'

UNIVERSITY OF NORTH BENGAL
B.Sc. Honours 5th Semester Examination, 2023

DSE-P1-GEOLOGY
CLIMATOLOGY

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) Chinook
 - (b) 'Bwh' type of climate
 - (c) Cumulonimbus cloud
 - (d) Albedo
 - (e) Humidity
 - (f) Wien's Law
 - (g) Tundra
 - (h) Mist.

2. Answer any **three** questions from the following: 5×3 = 15
 - (a) "Monsoon is the lifeline of India". Explain this statement and the factors on which Monsoon of India depends. 5
 - (b) Choose any five types of clouds and briefly explain how these clouds can be used to understand present weather and predict upcoming weather. Please draw the clouds you choose. 5
 - (c) You are somewhere in the Indonesian Archipelago in SE Asia. You then visit the Mediterranean region of Europe. Using Koeppen's scheme of climate classification, briefly explain the two different types of climate you experienced in the two above mentioned places in terms of temperature, rainfall and vegetation. 5
 - (d) With help of suitable diagrams, briefly explain the formation of a Cyclone. 5
 - (e) What are Jet Streams? How do Jet streams impact Climate? 5

3. Answer any **two** questions from the following: 10×2 = 20
 - (a) "Oxygen isotope study is one of best tools of Paleoclimatology". With help of suitable diagrams, explain this statement.
 - (b) With help of suitable diagram, explain how differential heating of Earth results in the major wind systems of Earth.
 - (c) "Milankovitch Cycle is a Climate Time Machine". Explain this statement with help of suitable diagrams.
 - (d) With help of suitable diagrams, explain the concept of Air Fronts and their impact on the Climate.

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