UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 6th Semester Examination, 2022

CC13-GEOLOGY

GEOMORPHOLOGY

Time Allotted: 2 Hours Full Marks: 40

The figures in the margin indicate full marks..

1. Answer any *five* questions from the following:

 $1 \times 5 = 5$

- (a) What is planetary geomorphology
- (b) How does potential evapotranspiration affect an area's aridity index?
- (c) "Complex wind directions can form transverse dunes"— Justify this statement.
- (d) Describe a simple geomorphic system with example.
- (e) Describe sediment transport rate on hillslopes.
- (f) How wetness index is attributed to a specific catchment?
- (g) What is geosyncline?
- (h) What is meant by "fan apex"?
- 2. Answer any *three* questions from the following:

 $5 \times 3 = 15$

- (a) How did the form and process controls the structure of any geomorphic system?
- (b) Write down short notes on "Rock cycle".
- (c) How can endogenic processes influence the evolution of the landscape?
- (d) Write down brief note about "Yardangs".
- (e) Describe three main forms of hillslope elements.
- 3. Answer any *two* questions from the following:

 $10 \times 2 = 20$

- (a) Discuss different types of drainage patterns using relevant diagrams.
- (b) Demonstrate how the backwearing and downwearing processes lead to the development of planar landforms.
- (c) Discuss the various erosional landforms seen in a karst environment. Use relevant drawings to describe the different erosive formations seen in a karst setting.
- (d) Write down the active and passive factors of rock weathering. How do these factors control the rock weathering?

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