

**The Assam Royal Global University, Guwahati**  
**Royal School of Environment and Earth Sciences**  
**B.Sc. (Hons.) Geology 1<sup>st</sup> Semester**  
**Semester End Examination, February 2022**  
**Course Title: Geomorphology**  
**Course Code: GEOL162C103**

**Time: 3 Hours**

**Maximum Marks: 70**

**Note: Attempt all questions as per instructions given.**  
*The figures in the right-hand margin indicate marks.*

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**Section – A**

1. Attempt **all** questions. (Maximum word limit 50) **2 x 8**
- a. What is Geoid?
  - b. What are ocean trenches and where they are formed?
  - c. What is meant by Frost Wedging?
  - d. Define the two broad categories of mass movement processes.
  - e. What are Barchans?
  - f. How is a pot hole formed?
  - g. What do you understand by sea-level change?
  - h. Why lunar surface has huge number of craters?

**Section – B**

2. Attempt **any two** of the following: **6 x 2**
- a. Explain briefly the concept and application of topographic studies.
  - b. Write briefly about the large-scale mountain ranges of earth.
  - c. Write a brief note on major morphological features of earth.
3. Attempt **any two** of the following: **7 x 2**
- a. Explain the different types of mass wasting processes with the help of suitable diagrams.
  - b. Write about the various types of chemical weathering processes with the help of examples.
  - c. Write an explanatory note on processes of formation of soil.
4. Attempt **any two** of the following: **7 x 2**
- a. Discuss about the landforms associated with igneous activities.
  - b. Explain the different types of aeolian erosional landforms with the help of suitable diagrams.
  - c. What is the relation between a river meander and an ox-bow lake? Write about the river depositional landforms formed during the mature stage of a river. **2+5**
5. Attempt **any one** of the following: **14 x 1**
- a. Write briefly about the major global sea level changes of earth.
  - b. Write a note on the interaction of endogenic and exogenic forces of earth.