

**M.Sc. I Semester Degree Examination, April/May - 2023****APPLIED GEOLOGY****Geomorphology and Structural Geology****(CBCS)**

Time : 3 Hours

Maximum Marks : 70

**Note :** Answer **any five** of the following questions with Question No. 1 Compulsory, each question carries **equal** marks.

1. Answer the following : 14
  - (a) What is weathering ? Explain the types of weathering processes and their impact on the landscape ?
  - (b) Give a detailed account on soil profile with neat sketch.
2. Answer the following : 14
  - (a) What is Aeolian Geomorphology, and what are the key features of Aeolian landscapes ?
  - (b) What is the Shepard's classification of coast, and what are its main components ?
3. Answer the following : 14
  - (a) Discuss the geomorphology of India.
  - (b) Explain what an ash shower is, how it forms, and what the potential impacts of ash showers are on the environment and human health ?
4. Answer the following : 14
  - (a) What is deformation, and how does it occur in rocks ? Describe the stages of deformation.
  - (b) Describe the different types of faults and their characteristics.
5. Answer the following : 14
  - (a) Explain the concept of plate tectonics and the different types of tectonic plate boundaries.
  - (b) Explain the process of seafloor spreading and how it provides further evidence for continental drift ?

- 6.** Answer the following : **14**
- (a) Explain the concept of plate tectonics and how it relates to the formation of oceanic crust and the features of the ocean floor.
  - (b) Discuss the relationship between glacial geomorphology and human activity, including the impacts of glacial retreat on water resources, agriculture, and tourism.
- 7.** Answer the following : **14**
- (a) What is joint in geology ? Explain the types of joints that exist.
  - (b) Define foliation and describe the different types of foliation that exist.
- 8.** Write a short note on : **14**
- (a) Penetrative and non-penetrative lineation
  - (b) Sand dunes
  - (c) Volcanic eruptions

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