

Name of the Course: B.Sc. Hons. Environmental Sciences - Core

Name of the Paper: Earth and Earth Surface Processes

Semester: I

Paper Code: 32181101

Duration: 3 Hours

Maximum Marks: 75

Instructions for Candidates

1. Answer any **four** questions.
2. All Questions carry **equal** marks.

1. If you visit a mountain range, you observe a configuration of several mountains and hills including various peaks, ridges and valleys. Briefly describe the alignment of major mountain ranges of the India and discuss their impact on weather conditions of India.
2. Continental drift hypothesis was suggested to explain the formation of the Earth's continents. Explain the hypothesis and describe the geological, geophysical and paleontological evidences to support the continental drift hypothesis.
3. "*Peninsular India is a geological museum*". Justify the statement and draw a sketch in support of your answer.
4. Discuss the climatic aspect of Himalaya in Indian subcontinent. Describe the spatial-geo environmental hazards in Himalaya and its impacts on agriculture in India.
5. Explain the concept of lithosphere plate movement, plate boundaries and plate tectonics with the help of diagrams? Based on the above explanation, discuss what leads to frequent earthquakes in Japan.
6. '*Foothills of the Shiwaliks are getting degraded due to constant erosion.*' Elucidate different physical processes of erosion and discuss what are the factors affecting erosion in this part of the Himalayas. With the help of diagrams, explain the role of glaciers in transporting and depositing sediments.