

PARUL UNIVERSITY
FACULTY OF APPLIED SCIENCES
M.Sc., Summer 2022-23 Examination

Semester: 4
Subject Code: 11211251
Subject Name: Environmental Geology

Date: 20-03-2023
Time: 2:00pm to 4:30pm
Total Marks: 60

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.
- 5.

- Q.1. A) Brief note on (4x2) (Each of 04 marks) (08)**
 (a) Earthquake
 (b) Floods
- Q.1. B) Answer the following questions (Any two) (04)**
 (a) Define the following briefly: (2x2) (Each of 02 marks)
 1. Risk. (04)
 2. Hazards (04)
 (b) Short note on Snow Avalanches (04)
 (c) Short note on the safety factor of landslides. (04)
- Q.2. A) Answer the following questions. (04)**
 (a) Write if the following statement is true or false. (Each of 02 marks)
 1. The geological process that operate in the past is different than the present geological process. (04)
 2. The number of species of plants and animals that are present in a region constitutes its species diversity. (04)
 (b) Short note on different levels of Richter scale. (04)
- Q.2. B) Answer the following questions (Any two) (03)**
 (a) Short note. (Each of 01 marks)
 1. Tsunami is caused by _____ beneath the water surface. (earthquakes, tides, floods) (03)
 2. Rocks at mid-oceanic ridges are _____ composition. (basaltic, felsic, silicic) (03)
 3. The million tons of snow and ice moving downslope at velocities of 5 to 30 meters per second is called _____. (landslides, avalanches, volcanism) (03)
 (b) Short note on tsunamis (03)
 (c) Short note on waves generated due to earthquakes. (03)
- Q.3. A) Essay type/ Brief note (4x2) (Each of 04 marks) (08)**
 (a) In a tabular form (Categories and Types of minerals with explanation) explain five major uses of minerals to human being. (08)
 (b) With the aid of a chart/diagram describe the broad classification of mineral resources
- Q.3. B) Answer the following questions (Any two) (04)**
 (a) Define (2x2) (Each of 02 marks)
 1. Flood (04)
 2. Hurricanes (04)
 (b) Short note on the types of landslides. (04)
 (c) Short note on types of minerals resources (04)
- Q.4. A) Answer the following questions. (04)**
 (a) Fill in the blanks. (Each of 02 marks)
 1. _____ lava flows from composite volcanoes. (04)
 2. The slow movement of the landslide is called _____. (04)
 (b) Short note on the origin and availability of fossil fuels (04)
- Q.4. B) Answer the following questions (Any two) (03)**
 (a) Do as directed: (Each of 01 marks)
 1. The 200 ecosystems in the world are rarest, richest and most distinctive natural areas called as _____ (Greenhouse effect, Global 200) (03)
 2. What are flash floods?
 3. Define Lahars (03)
 (b) Short note on the environmental impact due to mineral exploration. (03)
 (d) Short note the Genesis of Some Common Mineral Resources (03)