

B. Sc. 1st Semester (Honours) Examination, 2021

GEOLOGY

Course ID: 12011

Course Code: SHGEL-101C-1(T)

Course Title: Earth System Science

Time: 1 Hour 15 Minutes

Full Marks: 25

The figures in the right-hand side margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

1. Answer any five of the following questions: 1X5 = 5
 - a. Write one important difference between P- and S-waves.
 - b. What is the approximate depth of Gutenberg discontinuity?
 - c. Who proposed the concept of uniformitarianism?
 - d. Which is the most abundant element of the Earth?
 - e. Give two examples of siderophile elements.
 - f. Mention two major sources of energy in the geochemical cycle.
 - g. What is the mean distance (km) of the Earth from the Sun?
 - h. Who proposed the continental drift theory?

 2. Answer any two of the following questions: 5X2 = 10
 - a. Write a brief note on the processes of heat transfer within the Earth.
 - b. Classify volcanos based on the records of volcanic activities.
 - c. Briefly describe the subdivisions of the Earth based on the rheological properties of the earth materials.
 - d. Briefly describe the important characteristics of the solar system.

 3. Answer any one of the following questions: 10X1 = 10
 - a. Write a brief comparison between terrestrial and jovian planets.
 - b. Write a brief comparison among siderophile, chalcophile, lithophile and atmophile elements.
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