

B. Sc. 2nd Semester (Honours) Examination, 2021-2022

GEOLOGY

Course Id: 22011

Course Code: SH GEL-201C-3(T)

Course Title: Elements of Geochemistry

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. What is the full form of CHUR?
 - b. What is comet?
 - c. What are chalcophile elements?
 - d. Name one mineral in which ionic bond is present.
 - e. Name the most abundant element in the Earth crust.
 - f. Define SMOW.
 - g. What do you mean by cosmic abundance of elements?
 - h. Name one polymorph of calcite.
 2. Answer *any two* of the following questions: 5X2 = 10
 - a. Compare between advection and diffusion with respect to element transport in the Earth.
 - b. Write a short note on carbonaceous chondrite.
 - c. Briefly describe the significance of distribution coefficient (K_d) in geochemistry.
 - d. Define stable isotope. What are the causes of stable isotope fractionation? 2+3=5
 3. Answer *any one* of the following questions: 10X1 = 10
 - a. Compare among camouflage, capture, admittance and diadochy with suitable examples.
 - b. Briefly describe the principle of radiometric dating by K-Ar method. What are the disadvantages of this dating method? 6+4=10
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