B. Sc. 5th Semester (Honours) Examination, 2021 GEOLOGY

Course ID: 52017 Course Code: SHGEL-504DSE-2(T)

Course Title: Exploration Geology

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. Mention an important factor which controls the geochemical dispersion of elements?
- b. What is the pathfinder element for vein-type gold mineralisation.
- c. Name two geophysical methods used in hydrocarbon exploration.
- d. What is the full form of M.P.O.I?
- e. Name two elements which are chemically less mobile.
- f. What is the pathfinder element for uranium mineralisation.
- g. What is geochemical anomaly.
- h. What is atmogeochemical method for mineral exploration?
- 2. Answer any two of the following questions:

5x2 = 10

- a. Give a flow chart which summarises the sequence of work done in mineral exploration.
- b. Explain the reasons for use of pathfinder elements in exploration program.
- c. Describe pedogeochemical methods for mineral exploration.
- d. Write the important characteristics of primary and secondary geochemical environments?
- 3. Answer any one of the following questions:

10x1 = 10

- a. Briefly describe the primary and secondary dispersion patterns for mineral exploration
- b. Describe the surface geological and geochemical methods used for petroleum exploration.