650/Geol 22-23/52012

## B.Sc. Semester-V Examination, 2022-23 GEOLOGY [Honours]

Course ID: 52012 Course Code: SH/GEL/502/C-12(T)

**Course Title: Economic Geology** 

Time: 1 Hour 15 Minutes Full Marks: 25

The figures in the right-hand margin indicate marks.

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

- 1. Answer any **five** of the following questions:  $1 \times 5 = 5$ 
  - a) What is telethermal deposit?
  - b) Name an environmental setup for the formation of *evaporites*.
  - c) Name two hydrothermal alteration types associated with epithermal gold deposit.
  - d) What do you mean by colluvial placer deposit?
  - e) What is SEDEX deposit?
  - f) Define industrial minerals.
  - g) Write two uranium producing places in India.
  - h) Name a gemstone which is organic.

- 2. Answer any **two** of the following questions:  $5 \times 2 = 10$ 
  - a) Compare between the followings:  $2\frac{1}{2}+2\frac{1}{2}$ 
    - i) Epigenetic and Syngenetic deposits
    - ii) Greenfield and Brownfield explorations
  - b) Write a short note on manganese nodules.
  - c) Discuss on the liquid/magma segregation as an ore forming process.
  - d) Describe the Supergene enrichment process with a neat sketch.
- 3. Answer any **one** of the following questions:  $10 \times 1 = 10$ 
  - a) Give a detailed description on the early and late magmatic processes of ore formation. 10
  - b) What do you mean by porphyry type ore deposit?
     Discuss on the age, geological setting, and type of mineralization of Malanjkhand copper deposit.

$$2+(1+3+4)=10$$

\_\_\_\_