

Instructions to candidates

Duration: 02 hours

Number of questions: Five (05)

Number of questions to be answered: Four (04)

Mark allocation: 400

Illustrate your answers with sketches/diagrams where necessary

1.
 - a. What is Mineral Exploration? (10 mark)
 - b. Explain the role of a Geoscientist in the mineral exploration process. (20 mark)
 - c. Suppose that you have been given the task to explore mineral sand deposits along the northeastern coastal area of Sri Lanka. Explain how you would carry out this task. (70 mark)

2.
 - a. Define following terms. (25 mark)
 - i. Mineral Occurrence
 - ii. Mineral Resources
 - iii. Indicated Resources
 - iv. Measured Resources
 - v. Mineral Reserve

 - b. Suppose that you have been asked to evaluate newly discovered marble deposits for decorative stones. Discuss factors that need to be considered when selecting suitable locations. (75 mark)

3. Write detailed accounts on the following.
 - a. Geochemical Anomalies (50 mark)
 - b. Biochemical Prospecting (50 mark)

4.
 - a. What is soil geochemical prospecting? (20 mark)
 - b. Explain in detail the problems associated with soil geochemical method in mineral exploration. (80 mark)

5. Explain how you would carry out a stream sediment survey to study heavy mineral distribution in a given drainage basin. (100 mark)

