
Total 05 Questions
Answer all questions
Draw sketch diagrams where necessary

- 01) (i) Briefly describe the process of formation of a planet. (5 marks)
- (ii) What are the reasons for earth's differentiation and describe the process responsible for that. (10 marks)
- (iii) Discuss the evolution of the earth's hydrosphere. (5 marks)
- (iv) What is an unconformity and describe the formation of an angular unconformity. (5 marks)
- (v) Discuss the difference between time and rock stratigraphic units. (5 marks)

(Total-30 marks)

- 02) (i) Some minerals are weather resistant while some are highly prone to weathering. Explain this statement using Bowen's reaction series. (5 marks)
- (ii) Discuss the role of weathering in the rock cycle. (5 marks)
- (iii) Why do we find different grades of weathering in a given soil profile? (5 marks)

(Total - 15 marks)

- 03) (i) Under what conditions are ductile structures formed? (5 marks)
(ii) Describe different types of brittle structures. (10 marks)
(Total – 15 marks)

- 04) (i) What are the driving forces of plates movements (5 marks)
(ii) List five slopes stabilizing methods. (5 marks)
(iii) Distinguish between shield volcanoes, composite volcanoes and cinder cones. (5 marks)
(Total – 15 marks)

- 05) (i) What are Wegener's original evidences for "Continental Drift". (5 marks)
(ii) What are the main types of plate boundaries? Describe the process taking place at each? (10 marks)
(iii) Explain how you would locate an earthquake. (5 marks)
(iv) Explain how plate tectonics can account for the formation of younger mountain belts. (5 marks)
(Total – 25 marks)

