

paleogeographic analysis help in stratigraphic analysis.

What do you understand by 'compensated sequence' and non-compensated sequence'?

[This question paper contains 4 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 1064

D

Unique Paper Code : 2192011103

Name of the Paper : Concepts of Stratigraphy

Name of the Course : B.Sc. Hons Geology

Semester : I (NEP) 2022-2023

Duration : 3 Hours **Maximum Marks : 90**

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt any **five** questions.
3. **All** questions carry equal marks.

1. (a) What is GSSP? Define with example. Discuss primary and secondary criteria followed for selection of a geological section as GSSP.

(b) What is Event stratigraphy? Discuss with example.

2. Define 'Biozone' and 'Biochronozone'. With proper example and suitable figure discuss the necessity of keeping different acronyms (FAD, LAD, LO, HO etc.) for exercising biochronology in geological system.

3. Write short notes on (any three):

(a) Order of superposition in deformed strata

(b) Law of faunal succession

(c) Integrated Magneto-Biochronologic Scale (IMBS)

(d) Mass-Extinction and its relevance in stratigraphy

(e) Stratigraphic Hiatus

4. What is the smallest unit in chronostratigraphic scale? How is it expressed in rock succession? Outline standard stratigraphic and geological time scale for Phanerozoic Eon citing the major global-scale events

5. (a) What are Paleomagnetism and Magneto-stratigraphy? Enumerate classification of rock sequence on the basis of magnetic character and radiometric date.

(b) Enumerate how seismic wave help in carrying out subsurface stratigraphy.

6. What is geochronology? How is it useful for stratigraphy? With suitable diagrams discuss how Rubidium (Rb) – Strontium (Sr) systematics can be used for determination of crystallization age and deformation age of a granite unit.

7. What do you understand by 'Phylogenetic analysis'? How this analysis helps in refining biostratigraphy of an area? What are derived fossils? What sort of role they play in stratigraphic analysis?

8. What is sedimentary facies? With example discuss how sedimentary facies, bionomic analysis and