

1(CCE -M)6
GEOLOGY -I
[11]

Time Allowed -3 Hours

Maximum Marks-300

INSTRUCTIONS

- i) Answers must be written in English.
- ii) The number of marks carried by each question is indicated at the end of the question.
- iii) The answer to each question or part thereof should begin on a fresh page.
- iv) Your answer should be precise and coherent
- v) The part/parts of the same question must be answered together and should not be interposed between answers to other questions.
- vi) Candidates should attempt 5 questions in all. The question number **one** is compulsory.
- vii) If you encounter any typographical error, please read it as it appears in the text-book.
- viii) Candidates are in their own interest advised to go through the General Instructions on the back side of the title page of the Answer Script for strict adherence.
- ix) No continuation sheets shall be provided to any candidate under any circumstances.
- x) Candidates shall put a cross(X)on blank pages of Answer Script.
- xi) No blank page be left in between answer to various questions.
- xii) No programmable Calculator is allowed.
- xiii) No stencil(With different markings) is allowed.
- xiv) In no circumstances help of scribe will be allowed.

1. Write notes on the **Five** of the following questions **(5×20=100)**
- a) Types of radiometric dating methods are used to date rocks older than 100,000 years.
 - b) Characteristics of geosynclines and its categories.
 - c) Wilson cycle and Rifting.
 - d) Drag fold and recumbent fold.
 - e) Wolly mammoth and Gomphotherium.
 - f) Hyrocotherium species.
 - g) Major drinage patterns with sketches.

2. a) Give a detailed account of major stratigraphic formations of India in a chronological order. (25)
- b) Give specific examples with reference to standard geological time in the order of increasing antiquity. (25)
3. a) What are the processes responsible for the formation of oceans and the mountains in continents? (25)
- b) Explain the theory of sea floor spreading? (25)
4. Write notes on the **Four** of the following: (4×12.5=50)
- a) Cretaceous palaeogeography of the India.
- b) Dharwar Precambrian sedimentary basin.
- c) Neanderthals man.
- d) Starato Volcanoe in barren island .
- e) Carbon Dating.
5. What are the different stresses that resulted in various forms of geological structures, give two well know examples with neat sketches. (50)
6. Explain the means and ways to use the micro fossils along with biostratigraphy in the exploration of oil and gas. (50)
7. Give a brief introduction to Gondwana Flora of India? Explain how the principal genus of the floral assemblage help in classify the various divisions? (50)
8. Explain the role of tectonic, erosion and climatic forces interaction happened in the mountain building activity. (50)

(OR)

Explain the link between the Himalayan mountain elevated terrain and its effect on climate. How do you justify that the uplift is a result of climate change?