2024

M.Sc.

Second Semester

CORE - 06

GEOLOGY

Course Code: MGLC 2.21 (Stratigraphy & Quaternary Geology)

Total Mark: 70 Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT_I

1. Explain the controlling factors on the development of stratigraphic record.

7×2=14

- 2. Write notes on the following:
 - (a) Completeness or incompleteness of stratigraphic records
 - (b) Lithostratigraphic correlation

UNIT-II

3. Write an account on sequence stratigraphy.

14

14

4. Write notes on *any two* of the following:

 $7 \times 2 = 14$

- (a) Event stratigraphy
- (b) Seismic stratigraphy
- (c) Chemostratigraphy

UNIT-III

- 5. How has the palaeogeography of the Indian subcontinent changed over the past 200 million years?
- 6. Write notes on the following:

 $7 \times 2 = 14$

(a) Processes involved in mountain-building activities that shaped the topography of Indian subcontinent

(b) Application of carbon and oxygen isotope

UNIT-IV

- 7. What are the major subdivision of the quaternary period? How are they defined? Explain how climate and environmental conditions changed during the quaternary period? 14
- 8. Write notes on the following:

 $7 \times 2 = 14$

- (a) Principle, application, and limitation of luminescence chronology.
- (b) Neogene-quaternary boundary

UNIT-V

- 9. Give a brief account of the quaternary sedimentary records from the coastal plains of India. 14
- 10. Writes notes on *any two* of the following:

 $7 \times 2 = 14$

- (a) Himalayan foreland
- (b) Gangetic plains
- (c) Central Indian

-2-