23P435 (Pages: 2) Name : .....

Reg. No : .....

FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2025

(CBCSS-PG)

(Regular/Supplementary/Improvement)

CC19P GEL4 C10 - GEOCHEMISTRY AND ISOTOPE GEOLOGY

(Applied Geology)

(2019 Admission onwards)

Time: 3 Hours Maximum: 30 Weightage

Part-A

Answer any ***four*** questions. Each question carries 2 weightage.

1. Explain the distribution of elements in core.
2. Explain alpha ladder process.
3. State first law of thermodynamics.
4. Define vector diagram.
5. Define indicator elements.
6. Explain Rb- Sr dating.
7. Explain the principle of TIMS.

(4 × 2 = 8 Weightage)

Part-B

Answer any ***four*** questions. Each question carries 3 weightage.

8. Explain Goldschmidt's classification of elements.
9. Explain types of Co-ordination number.
10. Explain applications of major, minor, trace elements.
11. Explain the principes of dating.
12. Explain concordia and discordia diagram in dating.
13. Discuss the characteristics of stable isotopes.
14. Explain fission track method.

(4 × 3 = 12 Weightage)

Part-C

Answer any ***two*** questions. Each question carries 5 weightage.

15. Explain chemical bonding and its types.

16. Explain Trace element and REE importance in fractional crystallization.

17. Explain Geochemical cycle.

18. Discuss on AAS.

(2 × 5 = 10 Weightage)

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