

22P435

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Name:

Reg.No:

FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2024

(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 atmosphere and hydrosphere.
2. Describe origin of the solar system.
3. Explain TAS discriminant diagram.
4. Define trace elements.
5. Explain decay of radioactive atoms.
6. Explain U- Th- Pb method of dating.
7. Define oxygen isotope.

(4 × 2 = 8 Weightage)

Part-B

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

8. Explain chemical bonding.
9. Explain Gibbs phase rule.
10. State first and second law of thermodynamics.
11. Explain Frenkel defects and Schottky defects on trace elements.
12. List primary and secondary minerals in saprolite.
13. Explain principles of geochemical prospecting.
14. Explain fission track method.

(4 × 3 = 12 Weightage)

Part-C

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

15. Explain meteorites.
16. Explain Rb- Sr Method of dating.
17. Explain on flame photometer.
18. Discuss on ICP-MS.

(2 × 5 = 10 Weightage)
