

PD-184 CV-19
(581) M.Sc. Geology (Ist Semester)
Examination Dec.-2020
GEOCHEMISTRY
Paper - III

Time : Three Hours]

[Maximum Marks : 080
[Minimum Pass Marks :

नोट : दोनों खण्डों से निर्देशानुसार उत्तर दीजिये। प्रश्नों के अंक उनके दाहिनी ओर अंकित हैं।

Note : Answer from both the Section as directed. The figures in the right hand margin indicate marks.

SECTION-'A'

1. Answer the following objective type questions: $1 \times 10 = 10$

- a. What are the components of solar system?
- b. Which is most abundant element in universe?
- c. What do you mean by Free Energy?
- d. Write down about Gibb's Phase Rule.
- e. Which is most abundant element in 'Core'?
- f. What is depth zone of Mantle?
- g. What do you mean by Soil Profile?
- h. Explain Redox in natural water.
- i. Name three stable Isotopes.
- j. Which is prominent component of River Water?

SECTION-'B'

2. Answer following short type questions: $2 \times 5 = 10$

- a. Write a note on composition of Meteorites.
- b. Write a note on geochemistry of crust.
- c. Write a note on formation of core.
- d. Write a note on geochemical properties of clay.
- e. Write a note on distribution of CO_2 in ocean.

SECTION-'C'

$12 \times 5 = 60$

3. Write a note on cosmic abundance of elements.

Or

Describe the geochemical classification of elements.

4. Write down fundamental law of thermodynamics.

Or

Explain the Geochemistry of Crust.

5. Write a note on composition of mantle.

Or

Write a note on formation of core.

6. Write a note on geochemical properties of clay.

Or

Write notes on:-

(a) Soil profile (b) Eutrophication

7. Describe the basics of Stable Isotope Geochemistry.

Or

Write notes on composition of sea-water.