

PD-400 CV-19
(583) M.Sc. Geology (IIIrd Semester)
Examination Dec.-2020
MINERAL EXPLORATION
Paper - IV

Time : Three Hours]

[Maximum Marks : 080]
[Minimum Pass Marks :

नोट : दोनों खण्डों से निर्देशानसार उत्तर दीजिये। प्रश्नों के अंक उनके दाहिनी ओर अकित हैं।

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

SECTION-'A'

1. Answer the following questions in short: $1 \times 10 = 10$

- What do you mean by 'ore guide'?
- Define the 'Sampling'.
- What do you mean by Grade of ore?
- What is tonnage factor?
- What is the principle of seismic prospecting?
- What do you mean by Bore hole logging?
- What is geochemical cycle?
- What is secondary dispersion?
- What is the work of Atomic Absorption Spectrometre?
- Write down the name of mineral having plutonic association.

SECTION-B

2. Write down the answers in short: $2 \times 5 = 10$

- What do you mean by Stratigraphic ore guides?
- Define tonnage factor.
- Write down the principle of Electric Resistivity Survey.
- Write note on main types of Geochemical Survey.
- Write a note on Emission - Spectrograph.

SECTION-'C'

$$12 \times 5 = 60$$

3. Describe various types of 'drillings'.

Or

Write down general principles & procedures of 'Sampling'.

4. Write down the methods of calculating tonnage & grade of ores..

On

Write notes on:-

(a) Average grade (b) Borehole logs

5. Write an essay on radiometric survey, its application & interpretation of data.

On

Write an essay on principles and borehole logging methods.

6. Write a note on main types of Geochemical Survey.

On

Write notes on:-

(a) Biogeochemical Survey (b) Pedogegeochemical Survey

7. Write notes on:-

Q1

Write notes on:-

(a) Statistical treatment of geochemical data