

Code No. : B03/306

- (B) Write the definition of residual ore. 2
- (C) Discuss the role of photogeological applications in mineral exploration. 4

Or

Write a brief on application of remote sensing techniques in mineral exploration.

- (D) Discuss in detail, any case study of exploration of metallic mineral deposits. 12

Or

Describe in detail, application of geomorphological principles in mineral exploration.



Roll No.

Total No. of Sections : 4

Total No. of Printed Pages : 4

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III Semester Examination

M.Sc.

GEOLOGY

Paper III

[Mineral Exploration]

Time : Three Hours]

[Maximum Marks : 80

[Minimum Passing Marks : 16

Note : Part A and B of each question in each unit consist of very short answer type questions which are to be answered in one or two sentences. Part C (Short answer type) of each question will be answered 200-250 words. Part D (Long answer type) of each question should be answered within the word limit 400-450.

Unit-I

1. (A) Define term geological reconnaissance. 2
- (B) Write the meaning of term geological prospecting. 2
- (C) Give a brief on the duty of geologists during drilling. 4

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Or

Write a note on stratigraphic and lithologic guides.

- (D) What is drilling ? Give an account on type of drills and diamond drilling. **12**

Or

Explain the various methods and procedures of sampling.

Unit-II

2. (A) Define the principle on which the gravity method of prospecting is depends. **2**
- (B) What are the parameters which are measured in seismic prospecting ? **2**
- (C) Write a note on magnetometer. **4**

Or

Give a brief on basic principles of resistivity method of prospecting.

- (D) Describe, in detail, the various types of corrections applied to gravity data. **12**

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Or

What is radiometric survey ? Give an account on application, and data interpretation procedures of radiometric survey.

Unit-III

3. (A) Give definition of the Path finders of geochemical exploration. **2**
- (B) What is the geochemical mobility ? **2**
- (C) Make a neat illustration of the geochemical cycle. **4**

Or

Write a brief on Biogeochemical Surveys.

- (D) Give an account on principles of various borehole-logging methods. **12**

Or

Describe the forms on primary and secondary dispersion of elements.

Unit-IV

4. (A) What is placer deposit ? **2**