



বিদ্যাসাগর বিশ্ববিদ্যালয়
VIDYASAGAR UNIVERSITY

Question Paper

B.Sc. Honours Examinations 2022

(Under CBCS Pattern)

Semester - VI

Subject: GEOLOGY

Paper : DSE-3T

Full Marks : 40

Time : 2 Hours

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

(Exploration Geology)

A. Answer any **four** from the following questions :

5×4=20

1. Describe the sampling method and sample treatment in stream sediment survey.
2. Define mean, mode and median. Explain the relation between them.
3. What are the factors affecting reliability of reserve estimation?
4. What are the prime advantages of the wire-line drilling method?
5. Describe the different type of mineral deposit found in different types of tectonic setup.
6. What is the purpose of bore hole logging? Explain how to locate the number of holes on ground core logging.

P.T.O.

B. Answer **any two** from the following questions :

2×10=20

1. Discuss about the principles of mineral exploration.
2. Give a broad outline of the various surface methods that are adopted in prospecting for minerals.
3. Explain the scheme of exploration of oil and gas deposits by geochemical method.
4. How is geochemical anomaly formed by primary and secondary dispersion of elements? Briefly discuss the different types of rock and soil sampling carried out at different stages of geochemical exploration and mining activities.

Or

(River Science)

A. Answer any **four** from the following questions :

5×4=20

1. Describe the modes of sediment transport in rivers.
2. What are the differences between suspended and bed load?
3. Describe the bedrock incision process.
4. Explain how do rivers affect the ecosystem?
5. Briefly discuss about the role of drainage network in flux transfer.
6. Explain different types of features associated with flood plains.

B. Answer any **two** from the following questions :

10×2=20

1. Discuss about the river hydrographs and its application in hydrological analysis.
 2. What frequency of stream flow is most important at creating the hydraulic geometry (dimension, pattern & profile) of most bedrock-bed or large-boulder-bed streams?
 3. Describe the effects of climate and human disturbances on fluvial system.
 4. Compare how bars develop on meandering streams with the development of bars in braided streams.
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