

Roll No. :

Total No. of Questions : 11]

[Total No. of Printed Pages : 3

BFMS-437

M.Sc. (Final) Examination, 2023

GEOLOGY

Paper - VII

(Environmental Geology, Hydrogeology and Remote Sensing)

Time : 3 Hours]

[Maximum Marks : 75

Section-A

(Marks : 2 × 10 = 20)

Note :- Answer all *ten* questions (Answer limit **50** words). Each question carries **2** marks.

Section-B

(Marks : 5 × 5 = 25)

Note :- Answer all *five* questions. Each question has internal choice (Answer limit **200** words). Each question carries **5** marks.

Section-C

(Marks : 10 × 3 = 30)

Note :- Answer any *three* questions out of five (Answer limit **500** words). Each question carries **10** marks.

Section-A

1. (i) What is Hydrosphere ?
- (ii) World Environment Day ?
- (iii) What is Particle Pollution ?

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- (iv) What are the corrosive waste ?
- (v) Write the name carcinogenic Pollutant.
- (vi) What is effective Porosity ?
- (vii) Define the aquitard.
- (viii) Write suitable example of Effluent River/stream in Rajasthan.
- (ix) What is Pseudoscopic vision ?
- (x) What is Geo-stationary satellites ?

Section–B

Unit–I

2. Write the Fundamental concepts of Environment

Or

What is Pollution ? Explain in brief type of Pollution.

Unit–II

3. Describe the vertical distribution of groundwater.

Or

Describe the rock properties affecting groundwater.

Unit–III

4. Discuss the conjunctive use of surface and groundwater reservoirs.

Or

Describe the recharge well method for Groundwater.

Unit–IV

5. Discuss the vertical exaggeration and its estimation.

Or

Explain the preparation of base map by Radial triangulation methods

Unit-V

6. Describe the Satellite Remote Sensing and its limitations.

Or

Use of Remote Sensing in Petroleum exploration.

Section-C

7. Describe the various types of wastes and their disposal with examples.
8. Drive the Darcy's Law of Permeability and its limitations.
9. Describe various types of Geophysical prospecting Methods use for groundwater explorations.
10. Define Remote Sensing and its types. Differentiate between electromagnetic Radiation and Spectrum.
11. What is Geographic Information System (GIS) and its applications ?