

Roll No. :

Total No. of Questions : 11]

[Total No. of Printed Pages : 3

BPF-2214

M.Sc. (Final) Examination, 2022

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) Define Environmental Geology.
- (ii) What are Radioactive wastes ?

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BPF-2214 P.T.O.

- (iii) What is Darcy's Law ?
- (iv) What is Flow Lines ?
- (v) What are Groundwater Basins ?
- (vi) What is Hydrologic equilibrium ?
- (vii) Discuss Hydrogeologic well logging.
- (viii) What are Mosaic ?
- (ix) Discuss Films and Filters.
- (x) Discuss types of Satellites.

Section-B

Unit-I

2. Discuss Environmental Impact Assessment (EIA).

Or

Discuss types and factors of pollution.

Unit-II

3. Describe Aquifers and their types.

Or

Discuss Hydrogeologic characteristics of Common Rock types.

Unit-III

4. Describe the groundwater potentials of Western Rajasthan.

Or

Describe the Artificial Recharge Methods.

Unit-IV

5. Discuss Multispectral Sensors and Scanners.

Or

Describe the Infrared photography and Multiple Band photography.

Unit-V

6. Describe the Indian Space Mission.

Or

Discuss Satellite Remote Sensing and their limitations.

Section-C

7. Discuss river flooding and their extent of Hazard with perception of river flooding.
8. Discuss groundwater criteria for drinking, irrigation and industrial purposes.
9. Describe the Geological and Hydrogeological methods of groundwater exploration.
10. Describe the types, errors and distortion of Aerial photographs.
11. Discuss application of Aerial photograph in mineral exploration.