

Roll No :

Total No. of Questions : 11]

[Total No. of Printed Pages : 3

SP-692

M.Sc. (Final) Examination, 2021

GEOLOGY

Paper - VII

(Environmental Geology, Hydrogeology and Remote Sensing)

Time : 1½ Hours]

[Maximum Marks : 75

Section-A

(Marks : 2 × 10 = 20)

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

(खण्ड-अ)

(अंक : 2 × 10 = 20)

नोट :- सभी दस प्रश्नों के उत्तर दीजिए (उत्तर-सीमा 50 शब्द)। प्रत्येक प्रश्न 2 अंक का है।

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.

(खण्ड-ब)

(अंक : 5 × 5 = 25)

नोट :- सभी पाँच प्रश्नों के उत्तर दीजिए। प्रत्येक प्रश्न में विकल्प का चयन कीजिए (उत्तर-सीमा 200 शब्द)। प्रत्येक प्रश्न 5 अंक का है।

Section-C

(Marks : 10 × 3 = 30)

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

(खण्ड-स)

(अंक : 10 × 3 = 30)

नोट :- पाँच में से किन्हीं तीन प्रश्नों के उत्तर दीजिए (उत्तर-सीमा 500 शब्द)। प्रत्येक प्रश्न 10 अंक का है।

BI-333

(1)

SP-692 P.T.O.

Section–A

2 each

1. Define the following :
 - (i) Hydrologic cycle
 - (ii) Environmental Pollution
 - (iii) Aquifers
 - (iv) Safe yield
 - (v) Overdraft
 - (vi) Artificial recharge
 - (vii) Remote sensing
 - (viii) Scale of aerial photograph
 - (ix) Electromagnetic spectrum
 - (x) Geostationary satellites

Section–B

5 each

2. What are different types of Wastes ? Explain radio active wastes and their disposal.

Or

Define Landslides and discuss how we can identify landslide and also methods of its prevention.

3. Discuss hydrological cycle and vertical distribution of groundwater.

Or

Discuss different properties of rocks on which ground water movement is effected.

4. Explain conjunctive use of surface and ground water reservoirs.

Or

Explain different groundwater exploration methods.

5. Explain difference between Maps and Aerial photographs.

Or

What are different types of films used in aerial photography ?

6. Explain different types of satellites used in satellite remote sensing.

Or

Write applications of Remote sensing in different fields.

Section–C

10 each

7. (a) Describe earthquakes and its perception.

(b) Environmental pollution due to open cast mining and its control.

8. (a) Explain Darcy's law.

(b) Water wells types and construction methods.

9. (a) Discuss ground water potentials of India.

(b) Explain need of artificial recharge.

10. (a) Define the following :

(i) Active sensors

(ii) Optical axis

(iii) Fiducial mark

(iv) Exposure interval

(v) Focal length

(b) Explain different types of aerial photographs based on scale of photograph.

11. (a) What is GIS ? Explain its components.

(b) Discuss applications of GIS.