

45042

M.Sc. DEGREE EXAMINATION, APRIL 2018.

Geology

FOURTH SEMESTER

Paper II — HYDROGEOLOGY AND WATERSHED MANAGEMENT

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — (5 × 3 = 15 marks)

Answer any FIVE questions.

Each questions carries 3 marks.

Each answer should not exceed 1 page.

1. Origin of water.
2. Types of aquifers.
3. Basin yield.
4. Types of wells.
5. Quality criteria for drinking purpose.
6. Saline water Intrusion.
7. Indicators of groundwater.
8. Unconsolidated sediments.

PART B — (4 × 15 = 60 marks)

Answer ALL questions.

Each answer carries 15 marks.

Each answer should not exceed 6 pages.

9. Describe the hydrological properties of rocks.
Or
10. Explain in detail about the hydrological cycle.
11. Discuss in detail about the Darcy's law and its application.
Or
12. Write a note on the well hydraulics in detail.

13. Explain the physical and chemical properties of water.

Or

14. Discuss the methods of artificial recharge of groundwater.

15. Explain the use of remote sensing data in selection of groundwater in hard rock terrain.

Or

16. Write an essay on the watershed management.

