

2022
B.A./B.Sc.
Fourth Semester
CORE - 10
GEOLOGY
Course Code: GLC 4.31
(Hydrogeology)

Total Mark: 70

Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT-I

1. Define surface run-off. Explain the components of drainage basin. 2+12=14

2. Write notes on the following: 7×2=14
 - (a) Infiltration
 - (b) Artisan aquifer

UNIT-II

3. Define absolute permeability. Explain how it allows fluids to flow through its pores. 2+12=14

4. Write notes on the following: 7×2=14
 - (a) Hydraulic conductivity
 - (b) Turbulent groundwater flow

UNIT-III

5. Explain the use of electrical resistivity method in groundwater exploration. 14

6. Describe the basic concept of well water hydraulics. 14

UNIT-IV

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| 7. With the help of graphical plot explain the method to interpret groundwater quality. | 14 |
| 8. Explain the chemical property of water. | 14 |

UNIT-V

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| 9. How is rainwater harvested? Explain. | 14 |
| 10. Describe the basic concept of water balance studies. | 14 |
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