



QP CODE: 23104636



23104636

Reg No : .....

Name : .....

**B.Sc DEGREE (CBCS) REGULAR/IMPROVEMENT/REAPPEARANCE  
EXAMINATIONS, FEBRUARY 2023**

**First Semester**

B.Sc Geology and Water Management Model III

**Vocational Course - GW1VOT02 - GROUNDWATER HYDROLOGY**

2017 Admission Onwards

E694B2FC

Time: 3 Hours

Max. Marks : 80

**Part A**

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. Define transpiration.
2. Discuss subsurface water.
3. Describe the various factors affecting evaporation.
4. What is meant by connate water?
5. List out the ground water zones.
6. Explain unsaturated zone.
7. Define aquiclude.
8. List out the factors influencing specific yield of a strata.
9. Define storage coefficient.
10. Cone of depression.
11. Agricultural sources of ground water contamination.
12. Define channel stream method.

(10×2=20)

**Part B**

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Describe cone of depression.





14. Describe unconfined and idealized aquifers.
15. Define hydraulic conductivity and Transmissibility.
16. Experimental verification of Darcy's law.
17. Describe geophysical method to find out groundwater.
18. Explain extraction barrier and injection barrier.
19. Explain upconing of saline water.
20. Explain groundwater depletion.
21. Explain stream channel, pit and recharge well methods.

(6×5=30)

### **Part C**

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Discuss various types of porosity, permeability and sources of groundwater.
23. Illustrate various sources of groundwater contamination.
24. Natural groundwater purification methods and salt water intrusion sources.
25. Describe various methods for artificial recharge.

(2×15=30)

