



QP CODE: 25047345



25047345

Reg No :

Name :

M.Sc DEGREE (CSS) EXAMINATION, NOVEMBER 2025

Third Semester

M Sc GEOLOGY

Core Course - GL010304 - HYDROGEOLOGY

2019 ADMISSION ONWARDS

D8238ECD

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

*Weight **1** each.*

1. Define hydrological cycle.
2. What is an aquifer?
3. What are fracture zones?
4. What is test drilling?
5. Differentiate water table and piezometric level.
6. What is Recovery test?
7. What is a tube well?
8. What is meant by specific capacity of pumps?
9. What is the desirable limit of arsenic content in drinking water ?
10. What is saline water intrusion?

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

*Weight **2** each.*

11. Explain the concepts of porosity and permeability.
12. Discuss various techniques used for hydraulic conductivity determination.
13. Discuss the applications of GIS in ground water exploration.
14. Explain electrical resistivity methods used for ground water investigations.
15. Explain the consequences of extreme climatic change.





16. Explain Thiem's equation.
17. Explain water quality criteria based on its use.
18. Write a short note on the major coastal aquifers of Kerala.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Describe various types of aquifers. Comment on the groundwater availability in these aquifers.
20. Illustrate various methods of drilling deep wells.
21. Describe various graphical representations of water quality data.
22. Give a detailed account of groundwater development and management.

(2×5=10 weightage)

