

17P421

(Pages: 2)

Name.....

Reg. No.....

FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2019

(CUCSS - PG)

(Environmental Science)

CC15P ES4 E22 – HYDROLOGY AND WATER RESOURCES

(Regular/Improvement/Supplementary)

(2015 Admission onwards)

Time: Three Hours

Maximum: 36 Weightage

I. Answer *all* questions. Each question carries 1 weightage.

1. Drainage basin.
2. Flow duration curve.
3. Ramsar sites in Kerala.
4. Riparian vegetation.
5. Water table aquifer.
6. Clarifiers.
7. Aquifuge.
8. COD
9. Surangas.
10. Evapotranspiration.
11. Hydrometeorology.
12. Darcy's law.
13. Flood frequency analysis.
14. Primary Water Treatment.

(14 x 1 = 14 Weightage)

II. Answer any *seven* questions. Each question carries 2 weightage.

15. What are the types of aquifers?
16. Write a note on different process of hydrologic cycle.
17. "Salinity is increasing in the surface and groundwater of Kerala". Write critical note on this statement.
18. Define runoff. Write a note on runoff characteristics.
19. Explain the structure and properties of water.
20. Write a brief note on significance of isotope hydrology.
21. Explain about water harvesting techniques.
22. What are the impacts of water pollution?

23. Briefly explain the secondary water treatment techniques.

24. Explain the ecosystem services of wetlands.

(7 x 2 = 14 Weightage)

III. Write an essay on any *two* of the following. Each question carries 4 weightage.

25. Comment on groundwater pollution in Kerala.

26. Explain the vertical distribution of groundwater with diagram.

27. Critically explain the pros and cons of river linking in India.

28. Explain various strategies adopted for flood and flood plain management.

(2 x 4 = 8 Weightage)
