FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, MARCH 2018
(Regular/Supplementary/Improvement)
(CUCSS - PG)
CC15P ES4 E22–HYDROLOGY AND WATER RESOURCES
(Environmental Science)
(2015 Admission onwards)

Time:Three Hours   Maximum: 36 Weightage

Part A
Answer *all* questions.Each question carries *1*weightage.

1. What is drainage divide?

2. Isotope hydrology.

3. Differentiate Aquitard and Aquiclude.

4. Differentiate sublimation and condensation.

5. Darcy's Law.

6. Skimming of waste water.

7. Hydrograph.

8. Specific yield and specific retention.

9. Explain watershed.

10. Flood plain management.

11. Evapotranspiration.

12. Storm water.

13. Surface water hydrology.

14. Define BOD.

(14 x 1 = 14 weightage)

Part B
Answer any *seven* of the following questions. Each question carries *2* weightage.

15. Explain the vertical distribution of groundwater.

16. Differentiate physiological and physical pollution of water.

17. Write down the functions of riparian vegetation.

18. Explain the rock properties that affect groundwater?

19. What are the factors that affect the fluctuation in groundwater level?

20. Write a brief note on rainwater harvesting techniques.

21. What is an Aquifer? Explain various types of aquifers with sketches.

22. Explain the factors that affect runoff hydrograph.

23. Comment on the objectives and components of watershed management.

24. Write a note on evapotranspiration and its controlling factors.

(7 x 2 = 14 weightage)

Part C

Answer any *two* of the following questions. Each question carries *4* weightage.

25. Give an account on the role of wetlands in disaster mitigation with respect to Kerala.

26. Write critical notes on National River Linking Project. Brief the concerns of Kerala on Pampa-Achencoil-Vaipar Link Project.

27. Explain the different process of hydrologic cycle.

28. Write an essay on water pollution and water treatment methods.

(2 x 4 = 8 weightage)

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