

16P248

(Pages: 2)

Name.....

Reg. No.....

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, MAY-2017

(Regular/Supplementary/Improvement)

(CUCSS - PG)

CC15P GEL2 C07 – HYDROGEOLOGY

(Applied Geology)

(2015 Admission Onwards)

Time: Three Hours

Maximum: 36 Weightage

I. Short answer type questions. Answer *all* questions.

1. Meteoric water.
2. Hydrograph.
3. Phreatic zone.
4. Spring.
5. Tracer test.
6. Barometric efficiency.
7. Pump test.
8. Water table contour map.
9. Isotope hydrology.
10. Cone of depression.
11. Hydrogeomorphic mapping.
12. Well screen.
13. Rainwater Harvesting.
14. Indo-Genetic alluvial province.

(14 x 1 = 14 weightage)

II. Short essay type questions. Answer any *seven* questions.

15. Hydrological cycle.
16. Hydrological properties of rocks.
17. Darcy's law and its experimental verification.
18. Problems of Arsenic and Fluoride in groundwater.

19. Ghyben-Herzberg relationship.
20. Well logging.
21. Application of remote sensing for groundwater exploration.
22. Specific capacity and its determination.
23. Problems of over-exploitation and groundwater mining.
24. Artificial methods of recharge of groundwater.

(7 x 2 = 14 weightage)

III. Long essay type questions. Answer any *two* questions.

25. What is an aquifer? Discuss the classification of aquifers.
Or
26. Mention the important physical and chemical properties of water. Describe the various methods of representation of water quality data.
27. Describe the surface geophysical methods of groundwater exploration with special emphasis on electrical resistivity method.
Or
28. Give an account of the various types of wells. Describe the drilling methods adopted for the construction of wells.

(2 x 4 = 8 weightage)

(14 x 1 = 14 weightage)

II. Short essay type questions. Answer any seven questions.

12. Hydrological cycle.
16. Hydrological properties of rocks.
17. Darcy's law and its experimental verification.
18. Problems of Arsenic and Fluoride in groundwater.