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Question Paper Code: 59101

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2020

Elective

Civil Engineering

15UCE901- HYDROLOGY

(Regulation 2015)

Duration: 1.15 hrs

Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

(Answer any six of the following questions)

1. Rainfall is also known as CO1- R
(a) Precipitation (b) Condensation (c) Infiltration (d) Down pour
2. How many types of rain gauges are there? CO1- R
(a) 2 (b) 3 (c) 4 (d) 5
3. The surface Run-off is the quantity of water CO2- R
(a) Absorbed by soil (b) Intercepted by buildings and vegetative cover
(c) Required to fill surface depressions (d) That reaches the stream channels
4. What does a hydrograph display? CO2- R
(a) Variations in sediment concentration against river discharge
(b) Variations in water temperature against discharge
(c) Variations in river discharge over time
(d) Variations in snowfall over time
5. Period of dry weather longer than normal is known as CO3- R
(a) Flood (b) Disaster (c) Drought (d) Famine
6. Flat land next to river is known as CO3- R
(a) Flood plain (b) Drought Plain (c) Valleys (d) Scarcity

7. The reservoirs for small storage and short period of time are CO4- R
 (a) Storage and conservation reservoirs (b) Flood control reservoirs
 (c) Distribution reservoirs (d) Drought control reservoirs
8. The level up to which the reservoir shall be full of water is called CO4- R
 (a) High level (b) Maximum level (c) Pool level (d) Surface level
9. Permeability is CO5- R
 (a) the ability of a solid to allow fluids to pass through
 (b) the process by which plants release water vapor to the atmosphere
 (c) the amount of water vapor in the air relative to the maximum amount of water vapor the air can hold
 (d) the percentage of pore space in the rock
10. The boundary between the saturated zone and the unsaturated zone is called the CO5- R
 (a) Water table (b) Aquifer (c) Aquiclude (d) Porosity

PART – B (3 x 8= 24 Marks)

(Answer any three of the following questions)

11. Explain the process of evapotranspiration and its measurement. CO1- App (8)
12. Explain the various climatic factors affecting runoff. CO2- U (8)
13. Explain flood wall and levees with suitable figure. CO3- U (8)
14. Explain with neat sketch storage zone of a reservoir. CO4- U (8)
15. What is Darcy's law? What are its limitations? How will you measure the coefficient of permeability of soil? CO5- U (8)

