Question Paper Code: R18A32CE04

R18

ANURAG Engineering College

(An Autonomous Institution)

III B.Tech II Semester Regular/Supplementary Examinations, June/July-2024

WATER RESOURCES ENGINEERING

(CIVIL ENGINEERING)

Time: 3 Hours **Max.Marks:75**

Section – A (Short Answer type questions) (25 Marks)

Answer All Questions		Course Outcome	B.T Level	Marks
1.	list out two factors affecting infiltration	CO1	L1	2M
2.	list the applications of engineering hydrology	CO1	L1	3M
3.	What is a synthetic hydrograph	CO2	L2	2M
4.	Write a short note on Direct runoff	CO2	L2	3M
5.	Define Aquifer and Aquiclude?	CO3	L1	2M
6.	Write any 3 Assumptions in Dupuit's theory?	CO3	L2	3M
7.	What is meant by Inundation Irrigation?	CO4	L1	2M
8.	What are the advantages of crop rotation?	CO4	L2	3M
9.	Write the requirements of good lining material?	CO5	L1	2M
10.	Write about balancing depth of cutting	CO5	L2	3M

Section B (Essay Questions)

Answer all questions, each question carries equal marks. (5 X10M = 50M)

11. A)	Discuss the methods of measurement of Evapo transpiration.	CO1	L2	10M
	OR			
B)	The annual rainfall in cm at a station for a period of 21 years from 1960 to 1980 are 97, 125, 103, 81, 101, 119, 103, 79, 102, 118, 98, 83, 105, 123, 100, 86, 99, 114, 91, 83 and 106. Determine the 75% dependable rainfall from the frequency analysis.	CO1	L3	10M
12. A)	List and explain Base flow- Separation methods.	CO2	L2	10M
	OR			
B)	A watershed of 630 acres has 400 acres of row crop, contoured, good rotation and 230 acres in rotation meadow, contoured, good rotation. Find the direct runoff for a rain of 5.1 cm. Assume Missing Data.	CO2	L3	10M
13. A)	Explain the method of determining the coefficient of transmissibility of a confined aquifer by pumping out test. How can this method be extended for unconfined aquifer?	CO3	L3	10M
	OR			
B)	Explain with neat sketch the Strainer type tube well?	CO3	L2	10M
14. A)	Explain Water logging and causes, effects and remedial measures.	CO4	L2	10M
	OR			
B)	Explain the factors affecting DUTY.	CO4	L2	10M
15. A)	Classify and explain briefly the classification of canals based on the purpose.	CO5	L2	10M
	OR			
B)	Enumerate various types of linings used for canal?	CO5	L2	10M