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Roll No.

4th Sem.

Branch : Civil Brick Tech., Constr.,

Mgmt., Highway Engg.

Subject : Irrigation Engineering

Time : 3 Hrs.

M.M. : 100

SECTION-A

Note: Multiple Choice Questions. All Questions are compulsory. (10x1=10)

- Q.1 Wheat is the _____ crop. (CO2)
a) Kharif b) Rabi
c) Kor d) None of these
- Q.2 Float type rain gauge is also known as _____ rain gauge (CO-3)
a) Syphon
b) I.M.D. Standard rain gauge
c) Weighing bucket type
d) Tipping bucket type
- Q.3 The _____ is a solid construction put across the river to raise its water level. (CO-8)
a) Weir b) Barrage
c) Divide wall d) None of these
- Q.4 Syphon super passage is also called _____ (CO-9)
a) Canal syphon b) Fish ladder
c) Weir d) None of these

- Q.5 Barrages are much more costlier than weirs (CO-9)
a) True b) False
- Q.6 _____ are located in the canal at a distance downstream from the head of canal (CO-9)
a) Silt ejectors b) Silt excluder
c) Approach channel d) A & B both
- Q.7 Surplus water escape is also known as _____ (CO-10)
a) Canal surplus escape b) Head regulator
c) Cross regulator d) None of these
- Q.8 Canal head regulator does not control the entry of silt into the canal (CO-10)
a) True b) False
- Q.9 Guide banks protect _____ from river attack. (CO-11)
a) Regulator b) Spurs
c) Levees d) None of these
- Q.10 Seepage drains are surface drains (CO-12)
a) True b) False

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Maize is a rabi food crop. (True/False) (CO-2)
- Q.12 Delta is equal to $\frac{8.64D}{B}$ (True/False) (CO2)
- Q.13 Float type rain gauge is also called syphon rain gauge. (True/False) (CO3)

- Q.14 Run off is measured in _____. (CO3)
- Q.15 Diversion head works control the entry of _____ particles into the canal. (CO8)
- Q.16 Weir stores water for a longer duration. (True/False) (CO8)
- Q.17 The regulators are aligned at 90° to the weir. (True/False) (CO10)
- Q.18 A canal escape is a sort of _____. (CO10)
- Q.19 Rivers are usually originated from _____. (CO11)
- Q.20 The area subjected to water logging is called _____. (CO12)

SECTION-C

Note: Short answer type Questions. Attempt any twelve questions out of fifteen Questions. (12x5=60)

- Q.21 Define irrigation and explain its necessity? (CO1)
- Q.22 What are the advantages of crop rotation? Explain. (CO2)
- Q.23 Describe the importance of hydrology. (CO3)
- Q.24 Describe the conditions favouring sprinkler irrigation. (CO4)
- Q.25 What is drip irrigation? Give its advantages. (CO4)
- Q.26 What are the factors affecting canal alignment? Explain. (CO5)
- Q.27 List the various types of canal linings. (CO5)
- Q.28 Give advantages of ground water. (CO6)
- Q.29 What is a dam? Why is it constructed? Explain. (CO7)
- Q.30 Write the difference between weir and barrage? (CO8)
- Q.31 Define a) Aqueduct b) Super passage. (CO9)

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- Q.32 What are the functions of river training works? Explain. (CO11)
- Q.33 What is water logging? Give any two causes of it. (CO12)
- Q.34 Write note on the ill-effects of irrigation in India. (CO1)
- Q.35 Write short note on ground water recharge. (CO12)

SECTION-D

Note: Long answer questions. Attempt any two questions out of three Questions. (2x10=20)

- Q.36 Define the following terms related to ground water : (CO6)
- a) Aquifer b) Aquiclude
- c) Aquifuge d) Specific yield
- Q.37 Discuss briefly the various types of earth dam. (CO7)
- Q.38 Establish the relation between duty, delta and base period. (CO2)

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