

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 it's 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)

- 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)