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**4th Sem / Civil, Brick Tech., Constr. Mgmt.,
Highway Engg.
Subject:- Irrigation Engineering**

Time : 3Hrs.

M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory $(10 \times 1 = 10)$

Q.1 Rice is the _____ Crop.

- a) Kharif
- b) Cash
- c) Rabi
- d) None of the above

Q.2 A _____ is a graph which shows the variation of discharge with time.

- a) Hydrograph
- b) Hydrogram
- c) Hydrology
- d) All of the above

Q.3 Contour canal aligned nearly _____ to the contour of the area.

- a) Perpendicular
- b) Right angle
- c) Parallel
- d) None of the above

Q.4 The ratio of water retain by aquifer after saturation against gravity to its own volume is

- a) Specific yield
- b) Specific value
- c) Specific retention
- d) All of the above

Q.5 Dams constructed for flood control at various place are called

- a) Storage dams
- b) Detention dams
- c) Diversion dams
- d) over flow dams

Q.6 _____ is a solid construction put across the river to raise the water level in the river.

- a) Weir
- b) Head regulator
- c) Barrage
- d) Energy dissipater

Q.7 When canal is carried over the natural drainage is called.

- a) Aqueduct
- b) Level crossing
- c) Super passage
- d) Inlet and outlet

Q.8 A structure constructed on an irrigation canal for the disposal of surplus water from the canal is

- a) Spillway
- b) Head regulators
- c) Canal escape
- d) Inlet and outlet

Q.9 An artificial constructed island in the river bed and protected by stone pitching on all side is known as

- a) Groynes
- b) Cut-off
- c) Pitched islands
- d) Spurs

Q.10 The chances of water logging are more if rainfall is

- a) More
- b) Less
- c) Both (a) and (b)
- d) None of the above

SECTION-B

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

- Q.11 Define furrow irrigation. (CO4)
Q.12 Define drip irrigation. (CO4)
Q.13 Define spoil bank. (CO5)
Q.14 Define aquiclude. (CO6)
Q.15 Describe cone of depression. (CO6)
Q.16 Define gravity dam. (CO7)
Q.17 Define siphon aqueduct. (CO9)
Q.18 In case of super passage, canal flows _____ the drainage. (CO9)
Q.19 Canal should be aligned along _____ in order to reduce the number of cross drainage works. (CO9)
Q.20 What do you mean by water logging. (CO12)

SECTION-C

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

- Q.21 Define irrigation. State necessity of irrigation. (CO1)
Q.22 Find the delta for a crop when its duty is 545 hectares/ cumec on the field, the base period of this crop is 50 days. (CO2)
Q.23 Established relationship between duty, delta and base period. (CO2)

- Q.24 Name various types of rain gauges and explain any one in detail. (CO3)
Q.25 Explain run-off and give factors affecting run-off. (CO3)
Q.26 Describe the advantages and disadvantages of canal lining. (CO5)
Q.27 Define canal breaches. Explain its cause and remedies. (CO5)
Q.28 Compare canal and tube well irrigation. (CO6)
Q.29 Differentiate between weir and barrage. (CO8)
Q.30 Write a short note on canal head regulator. (CO8)
Q.31 Describe aqueduct and super passage. (CO9)
Q.32 Discuss the types of falls with neat sketches. (CO10)
Q.33 Define meandering. What are the cause of meandering? (CO11)
Q.34 Write a note on guide banks. (CO11)
Q.35 Write a short note on ground water recharge. (CO12)

SECTION-D

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

- Q.36 What is surface irrigation? Explain various method of surface irrigation. (CO4)
Q.37 State different methods which are used for boring tube well. Explain any one of them in detail. (CO6)
Q.38 Explain various cause of failure of earth dams.(CO7)