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Roll No.

**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 (10x1=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)

(3) 180743/170743/120743

- 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)

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(4) 180743/170743/120743