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**4th Sem / Branch : 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 Duty exclusive of rainfall is

- a) Low c) High
- b) Moderate d) None of the above

Q.2 Delta is equal to

- a)  $864B/D$  c)  $864D/B$
- b)  $D/864B$  d) None of the above

Q.3 Evaporation which takes place through plants is called

- a) Transpiration c) Hydrology
- b) Rainfall d) None of the above

Q.4 The area of the shaped catchment is \_\_\_\_\_ than a ferm shaped catchment

- a) More c) Less
- b) Moderate d) None of them

Q.5 In barrage, there is more silting

- a) True b) False

Q.6 Diversion hadworks control the entery of \_\_\_\_\_ particles into the canal.

- a) Silt c) Clay
- b) Sand d) Pebbles

Q.7 The regulators are aligned at \_\_\_\_\_ to the weir.

- a) 90 Degree c) 45 Degree
- b) 60 Degree d) 30 Degree

Q.8 A canal escape is a sort of \_\_\_\_\_

- a) safety valve b) Head regulator
- c) Sluice valve d) None of these

Q.9 Normal pattern changes its course from time to time

- a) True b) False

Q.10 Which of the following is a guide bank

- a) Divergent guide bank
- b) Parallel guide bank
- c) Both a & b
- d) Spurs

**SECTION-B**

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

Q.11 Base period is expressed in days. (True/False)

Q.12 In drip irrigation, water requirement is more. (True/False)

Q.13 Canal headwork are also known as diversion headwork. (True/False)

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- Q.14 A super passage is the reverse of aqueduct.  
(True/False)
- Q.15 There is no difference between canal siphon and siphon super passage. (True/False)
- Q.16 In case of super passage, canal flows \_\_\_\_\_ the drainage.
- Q.17 Rapid falls were also used for timber traffic.  
(True/False)
- Q.18 Cross regulator is usually combined with a road bridge. (True/False)
- Q.19 Embankments are also called \_\_\_\_\_.
- Q.20 The size of seepage drain is \_\_\_\_\_.

### **SECTION-C**

**Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions.  $(12 \times 5 = 60)$

- Q.21 Describe the benefits of irrigation.
- Q.22 Find the delta for a crop when its duty is 432 hec/cumec on the field, the base period of this crop is 60 days.
- Q.23 What is surface irrigation? Explain any one method.
- Q.24 Write short note on lift irrigation.
- Q.25 Describe the advantages of well irrigation.
- Q.26 Define:-  
a) confined aquifer      b) unconfined aquifer
- Q.27 What is gravity dam? Write any two advantages.

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- Q.28 What is spillway? Explain.
- Q.29 What is canal headworks? Also classify the types of canal headwork.
- Q.30 Differentiate between siphon and super passage.
- Q.31 Write the function of canal head regulator.
- Q.32 What is canal fall? Explain. Give its necessity.
- Q.33 What do you understand by river training works?  
Explain.
- Q.34 Write the effects of water logging.
- Q.35 Define:-  
a) Kharif crops      b) Rabi crops

### **SECTION-D**

**Note:** Long answer type questions. Attempt any two questions out of three questions.  $(2 \times 10 = 20)$

- Q.36 Give advantages and disadvantages of canal lining.
- Q.37 Describe the most widely used type of tubewell with a neat sketch.
- Q.38 What is water logging? Explain its causes, effects and preventive measures.

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