

IRRIGATION ENGINEERING: EXAM WITH ANSWERS

QUESTION 1

Regime conditions in a channel may occur if

- (A) Discharge is constant
- (B) Channel flows uniformly in incoherent alluvium as that transported in suspension
- (C) Silt grade and silt charge are constant
- (D) All the above

QUESTION 2

A river is said to be of

- (A) Aggrading type if it builds up its bed to a certain slope
- (B) Degrading type if it cuts its bed to a certain slope
- (C) Meandering type if it flows in sinuous curve

- (D) All the above

QUESTION 3

The ratio of the rate of change of discharge of an outlet and parent channel, is known as

- (A) Efficiency
- (B) Sensitivity
- (C) Flexibility
- (D) Modular limit

QUESTION 4

The width of a dowla is generally kept between 30 to 60 cm and its height above the road level should invariably be more than

- (A) 10 cm
- (B) 20 cm
- (C) 30 cm
- (D) 40 cm

QUESTION 5

Pick up the correct statement from the following:

- (A) Water table generally follows the ground surface above it with a few exceptions
- (B) Static level of water in an open well indicates the position of the water table
- (C) At water table, hydrostatic pressure is zero
- (D) All the above

IRRIGATION ENGINEERING: EXAM WITH ANSWERS

QUESTION 6

Lacey's equation for calculating flood discharge in rivers, is

- (A) $V = 10.8 R^{1/2} S^{1/2}$
- (B) $V = 10.8 R^{2/3} S^{1/2}$
- (C) $V = 10.8 R^{2/3} S^{1/3}$
- (D) $V = 10.8 R^{1/3} S^{2/3}$

QUESTION 7

A deficit of sediments in flowing water may cause a river

- (A) Meandering type
- (B) Aggrading type
- (C) Degrading type
- (D) Sub-critical type

QUESTION 8

Side slopes generally kept for canals in loam soil, are:

- (A) 1 : 1 in cutting and 1½ : 1 in filling
- (B) 1½ : 1 in cutting and 2 : 1 in filling
- (C) Neither (a) nor (b)
- (D) Both (a) and (b)

QUESTION 9

For the stability of a structure against seepage pressure according to Khosla's creep theory, the critical gradient is

- (A) Zero
- (B) 0.25
- (C) 0.50
- (D) 1.00

QUESTION 10

If B and d are the bed width and depth of a channel in metres, the combined losses due to evaporation and seepage in cumecs per kilometre length of the channel, is

- (A) $(1/50) \times (B + d)^{2/3}$
- (B) $(1/100) \times (B + d)^{2/3}$
- (C) $(1/150) \times (B + d)^{2/3}$
- (D) $(1/200) \times (B + d)^{2/3}$

IRRIGATION ENGINEERING: EXAM WITH ANSWERS

QUESTION 11

The length of a meander is the distance along the river between the tangent point of one curve to the tangent point of

- (A) Reverse curve
- (B) Next curve of the same order
- (C) Reverse curve plus the width of the river
- (D) None of these

QUESTION 12

The top of the capillary zone

- (A) Lies below the water table at every point
- (B) Lies above the water table at every point
- (C) Coincides the water table at every point
- (D) None of these

QUESTION 13

The depth of rice root zone, is

- (A) 50 cm
- (B) 60 cm
- (C) 80 cm
- (D) 90 cm

QUESTION 14

If the irrigation efficiency is 80%, conveyance losses are 20% and the actual depth of watering is 16 cm, the depth of water required at the canal outlet, is

- (A) 10 cm
- (B) 15 cm
- (C) 20 cm
- (D) 25 cm

QUESTION 15

In a barrage, the crest level is kept

- (A) Low with large gates
- (B) High with large gates
- (C) High with no gates
- (D) Low with no gates