**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
Answer: Option D

**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
Answer: Option D

**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
Answer: Option C

**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
Answer: Option C

**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
Answer: Option D

**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) $V = 10.8\ R^{1/3}\ S^{2/3}$
Answer: Option C

**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
Answer: Option C

**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)
Answer: Option D

**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
Answer: Option D

**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) $(1/200) \times (B + d)^{2/3}$

Answer: Option D

**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

Answer: Option B

**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

Answer: Option B

**QUESTION 13**

**The depth of rice root zone, is**

(A) 50 cm

(B) 60 cm

(C) 80 cm

(D) 90 cm

Answer: Option D

**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

Answer: Option D

**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

Answer: Option A