

1. Which of the following method of applying water may be used on rolling land ?

- a. Boarder flooding
- b. Check flooding
- c. Furrow flooding
- d. Free flooding

02. Cyclonic precipitation is caused by lifting or an air mass due to

- a. Pressure difference
- b. Temperature difference
- c. Natural topographical barriers
- d. None of the above

03. Which of the following is a non-recording raingauge ?

- a. Tipping bucket type raingauge
- b. Simon's raingauge
- c. Steven's weighing type raingauge
- d. Floating type raingauge

04. If allowable percentage error in the estimate of base rainfall is E and coefficient of variation of rainfall is C then the optimum number of raingauges is given by

- a. $\frac{C_V}{E}$
- b. $\sqrt{\frac{C_V}{E}}$
- c. $\left(\frac{C_V}{E}\right)^2$
- d. $\left(\frac{C_V}{E}\right)^{3/2}$

05. Which of the following types of raingauges is used for measuring rain in remote hilly inaccessible areas ?

- a. Tipping bucket type
- b. Weighing type
- c. Floating type
- d. Simos's raingauge

06. A 70% index of wetness means

- a. Rain excess of 30%
- b. Rain deficiency of 30%
- c. Rain deficiency of 70%
- d. None of the above

07. The normal annual precipitation at stations X, A, B and C are 700 mm, 1000 mm, 900 mm, and 800 mm respectively if the storm precipitation at three station A, B and C were 100 mm, 90 mm and 80 mm respectively, then the storm precipitation for station X will be

- a. 70 mm
- b. 90 mm
- b. 80 mm
- c. 105 mm

08. According to dicken's formula for estimating floods, the peak discharge is proportional to

- a. A
- b. $A^{1/2}$
- c. $A^{2/3}$
- d. $A^{3/4}$

09. An artesian aquifer is the one where

- a. Water surface under the ground is at atmospheric pressure
- b. Water is under pressure between two impervious strata
- c. Water table serves as upper surface of zone of saturation
- d. None of the above

10. Trap efficiency of a reservoir is a function of

- a. Capacity/inflow ratio
- b. Capacity/outflow ratio
- c. Outflow/inflow ratio
- d. None of the above

11. Neglecting uplift pressure, the base width of an elementary of a gravity dam shall be taken as

- a. $\frac{H}{\sqrt{G}}$
- b. $\frac{H}{\mu G}$
- c. lesser of $\frac{H}{G}$ and $\frac{H}{\mu G}$
- d. greater of $\frac{H}{\sqrt{G}}$ and $\frac{H}{\mu G}$

Where H is depth of water, G is specific gravity of material and μ is coefficient of friction.

12. In a chute spillway, the flow is usually

- a. Uniform
- b. Subcritical
- c. Critical
- d. Super critical

13. If there are two canals taking off from each flank of a river, then there will be

- a. One divide wall and one undersluice
- b. One divide wall and two undersluices
- c. Two divide walls and one undersluice
- d. Two divide walls and two undersluices

14. If h is the ordinate of hydraulic gradient line above the top of the floor and G is specific gravity of floor material, then the thickness of floor is given by the formula

15. If the critical shear stress of a channel is t_c then the average value of shear stress required to move the grain on the bank is

- a. $0.5 t_c$
- b. $0.75 t_c$
- c. t_c
- d. $1.33 t_c$

YouTube CHANNEL

EVEREXAM

16. Garret's diagrams are based on

- a. Kennedy's theory
- b. Lacey's theory
- c. Khosla's theory
- d. bligh's theory



Flood Irrigation in India

17. Garret's diagrams have been drawn for

- a. A semi-circular channel
- b. A trapezoidal channel with side slope $\frac{1}{2} H: 1V$
- c. A trapezoidal channel with side slope $1H: \frac{1}{2} V$
- d. Semi-elliptical channel



18. According to lacey, the bed slope is given by

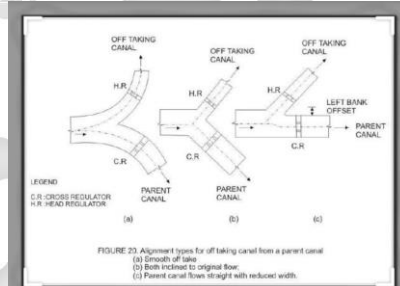
- a. $\frac{f^{4/3}}{3340Q^{1/2}}$
- b. $\frac{f^{2/3}}{3340Q^{1/4}}$
- c. $\frac{f^{5/3}}{3340Q^{1/6}}$
- d. $\frac{f^{1/3}}{3340Q^{5/3}}$



Where f is silt factor and Q is discharge in cumecs.

19. As per lacey's regime theory, the flow velocity is proportional to

- a. $(Qf^2)^{1/3}$
- b. $(Qf^2)^{1/6}$
- c. $\frac{Q}{f^2}$
- d. $\left(\frac{Q}{f^2}\right)^{1/6}$



20. Lining of irrigation channels

- a. Increase the waterlogging area
- b. Decreases the waterlogging area
- c. Does not change the water logging area
- d. None of the above



YouTube CHANNEL

EVEREXAM