Program: BE CIVIL Engineering

Curriculum Scheme: Revised 2012

Examination: Fourth Year Semester VII

Course Code: CEC 703 and Course Name: Irrigation Engineering

Time: 1 hour Max. Marks: 50

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Note to the students:- All the Questions are compulsory and carry equal marks .

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| Q1. | An irrigation project is classified as a major project, when the culturable command involved in the project, is more than: |
| Option A: | 2,000 hectares |
| Option B: | 5,000 hectares |
| Option C: | 10,000 hectares |
| Option D: | 20,000 hectares |
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| Q2. | Irrigation from wells is an example of: |
| Option A: | Groundwater irrigation |
| Option B: | Reservoir irrigation |
| Option C: | Tank irrigation |
| Option D: | Lift irrigation |
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| Q3. | In which type of irrigation method the entire land is not wetted? |
| Option A: | Furrow Method |
| Option B: | Free Flooding |
| Option C: | Contour Farming |
| Option D: | Basin Flooding |
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| Q4. | The maximum irrigation requirement of Rice crop is exhibited by its: |
| Option A: | maximum delta value |
| Option B: | maximum duty value |
| Option C: | minimum duty value |
| Option D: | minimum delta value |
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| Q5. | The crop, out of the following, which is not a cash crop, is-: |
| Option A: | Jute |
| Option B: | Tea |
| Option C: | Rice |
| Option D: | Sugarcane. |
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| Q6. | The optimum kor water depth for a Kharif crop is 19 cm with an allowed kor water period of 3 weeks, the outlet discharge factor for this crop will be: |
| Option A: | 955 ha/cumec |
| Option B: | 782 ha/cumec |
| Option C: | 860 ha/cumec |
| Option D: | 1.364 ha/cumec |
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| Q7. | If the intensity of rainfall is more than the infiltration capacity of soil, then the infiltration rate will be |
| Option A: | equal to rate of rainfall |
| Option B: | equal to infiltration capacity |
| Option C: | more than rate of rainfall |
| Option D: | more than infiltration capacity |
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| Q8. | The unit hydrograph of a specified duration can be used to evaluate the hydrograph of storms of |
| Option A: | same duration only |
| Option B: | same and shorter duration |
| Option C: | same and longer duration |
| Option D: | any duration |
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| Q9. | The respective storm totals at three surrounding stations A, B and C are 110, 90 and 70 mm. If the normal annual precipitation amounts at stations X, A, B and C are respectively 1000, 1100, 1200 and 1250 mm, the estimated storm precipitation at X is |
| Option A: | 75mm |
| Option B: | 77mm |
| Option C: | 79mm |
| Option D: | 81mm |
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| Q10. | The falling limb in hydrograph shows: |
| Option A: | how long the rain water takes to get into the river |
| Option B: | how quickly the rain water leaves the river |
| Option C: | how quickly the rain water enters the river |
| Option D: | how much precipitation there has been |
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| Q11. | Field capacity of a ground aquifer equals \_\_\_\_\_\_\_\_\_ |
| Option A: | specific yield |
| Option B: | 100 – specific yield |
| Option C: | 100/ specific yield |
| Option D: | specific yield-100 |
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| Q12. | A perched aquifer is found within \_\_\_\_\_\_\_\_\_\_\_\_ |
| Option A: | aquiclude |
| Option B: | confined aquifer |
| Option C: | unconfined aquifer |
| Option D: | both confined and unconfined aquifer |
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| Q13. | Vadose water lies in the zone of |
| Option A: | Aeration |
| Option B: | Saturation |
| Option C: | Gravitation |
| Option D: | Capillary |
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| Q14. | Which storage of reservoir depends upon the geological conditions of the river banks? |
| Option A: | Surcharge Storage |
| Option B: | Valley Storage |
| Option C: | Useful Storage |
| Option D: | Dead Storage |
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| Q15. | Silting in reservoir can be reduced by |
| Option A: | Allowing run-off from easily erodible catchment area |
| Option B: | Deforestation over the catchment area |
| Option C: | Excluding run-off from easily erodible catchment area |
| Option D: | Improper site selection |
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| Q16. | An elementary triangular concrete· gravity dam, supporting 60 m height of reservoir water and full uplift, should have a minimum base width equal to: |
| Option A: | 36 m |
| Option B: | 39 m |
| Option C: | 51 m |
| Option D: | 61 m |
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| Q17. | In an arch dam, the 'extrados curves' refer to the arch rings corresponding to the: |
| Option A: | upstream face of the dam |
| Option B: | downstream face of the dam |
| Option C: | upsteam of the axis of dam |
| Option D: | downstream of the axis of the dam |
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| Q18. | Earthen dams are: |
| Option A: | rigid dams |
| Option B: | non rigid dams |
| Option C: | overflow dams |
| Option D: | diversion dams. |
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| Q19. | During the construction of an earthen dam by hydraulic fill method, development of pore pressures become important in the: |
| Option A: | central impervious core |
| Option B: | pervious outer shell |
| Option C: | central core & outer shell |
| Option D: | central pervious shell |
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| Q20. | The base width of a rock fill dam, in comparison to that of an earthen dam, is : |
| Option A: | much larger |
| Option B: | much smaller |
| Option C: | sometimes larger sometimes smaller |
| Option D: | almost equal |
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| Q21. | A sloping apron is provided partly above the river bed and partly below the river bed in the case when |
| Option A: | TWC coincides with the JHC at all discharges |
| Option B: | TWC lies above the JHC at all discharges |
| Option C: | TWC lies below the JHC at all discharges |
| Option D: | TWC lies above the JHC at low discharges and below the JHC at high discharges |
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| Q22. | A land is said to be water-logged, when: |
| Option A: | the land is necessarily submerged under standing water |
| Option B: | there is a flowing water over the land |
| Option C: | the pH value of the soil becomes as high as 8.5 |
| Option D: | the soil pores in the root zone get saturated with water, either by the actual water table or by its capillary fringe |
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| Q23. | Cross-drainage work is called a siphon, when it carries the canal water: |
| Option A: | below the drainage under pressure |
| Option B: | below the drainage at atmospheric pressure |
| Option C: | above the drainage at atmospheric pressure |
| Option D: | above the drainage under pressure |
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| Q24. | The canal, which can irrigate only on one side, is a |
| Option A: | watershed canal |
| Option B: | contour canal |
| Option C: | Side sloppe canal |
| Option D: | power canal |
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| Q25. | Which of these canals draws water from rivers whenever there is high stage in the river? |
| Option A: | Perennial canal |
| Option B: | Inundation canal |
| Option C: | Watershed canal |
| Option D: | Distributary canal |