Program: BE Civil Engineering

Curriculum Scheme: Revised 2012

Examination: Third Year Semester VII

Course Code: CE-C 704 and Course Name: Environmental Engineering-II

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.  | What is night soil? |
| Option A: | a) Human excreta, animal excreta and urea |
| Option B: | b) Animal excreta |
| Option C: | c) Garbage |
| Option D:  | d) Sullage |
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| Q2. |  Wastewater from different sources like bathrooms, kitchens and wash basins is called |
| Option A: | a) Sewage |
| Option B: | b) Discharge |
| Option C: | c) Sullage |
| Option D: | d) Garbage |
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| Q3. | The main disadvantage of cement concrete sewers is  |
| Option A: | a) Less strength |
| Option B: | b) Less life |
| Option C: | c) Difficulty in construction |
| Option D: | d) Difficulty in transportation due to heavy weight |
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| Q4. |  For large sewers, maximum distance between manholes may be |
| Option A: | a)50 m |
| Option B: | b)100 m |
| Option C: | c)200 m |
| Option D: | d)300 m  |
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| Q5. | What are the facilities including pumps and equipment for pumping fluids from one place to another are called? |
| Option A: | a) Pumpers |
| Option B: | b) Pumping area |
| Option C: | c) Pumping facilities |
| Option D:  | d) Pumping stations |
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| Q6. | If ‘D’ is the diameter of upper circular portion, the overall depth of New Egg shaped sewer section, is |
| Option A: |  (A) 1.250 D |
| Option B: |  (B) 1.350 D |
| Option C: | 1.425 D |
| Option D:  |  (D) 1.625 D  |
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| Q7.  | Anaerobic digestion is carried out in\_\_\_ |
| Option A: | a) Presence of oxygen |
| Option B: | b) Absence of oxygen |
| Option C: | c) Presence of carbon-dioxide |
| Option D:  | d) Absence of carbon-dioxide |
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| Q8.  | The biochemical oxygen demand is computed by \_\_\_\_\_\_\_\_\_\_ |
| Option A: | a) Dissolved oxygen / Dilution factor |
| Option B: | b) Dissolved oxygen + Dilution factor |
| Option C: | c) Dissolved oxygen – Dilution factor |
| Option D:  | d) Dissolved oxygen \* Dilution factor |
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| Q9. | The permissible dose of chloride in domestic sewage is \_\_\_\_\_\_\_\_\_\_ |
| Option A: | a) 120ppm |
| Option B: | b) 10ppm |
| Option C: | c) 1ppm |
| Option D:  | d) 250ppm |
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| Q10.  | What is the minimum quantity of dissolved oxygen that should be present in the water |
| Option A: | a)10ppm |
| Option B: | b) 6ppm |
| Option C: | c) 4ppm |
| Option D:  | c) 1ppm |
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| Q11.  | The decomposition of sewage takes place, causing a pungent smell. Which of the following causes the pungent smell? |
| Option A: | a) CO2 |
| Option B: | b) H2SO4 |
| Option C: | c) HCL |
| Option D:  | d) H2S |
|  |  |
| Q12.  | Which of the following disease is caused due to lack of nitrates? |
| Option A: | a) Diphtheria |
| Option B: | b) Methemoglobinemia |
| Option C: | c) Tuberculosis |
| Option D: | d) Meningitis |
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| Q13. | What is the intermediate zone composed of in aerobic-anaerobic ponds?  |
| Option A: | a) Algae |
| Option B: | b) Aerobic bacteria |
| Option C: | c) Facultative bacteria |
| Option D:  | d) Organic solids |
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| Q14.  | Which of the following should be provided in the case where aeration is absent? |
| Option A: | a) Screening devices |
| Option B: | b) Mechanical mixers |
| Option C: | c) Grit removers |
| Option D:  | d) Sedimentation tank |
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| Q15. | What is the shape of a typical trickling filter? |
| Option A: | a) Cylindrical |
| Option B: | b) Square |
| Option C: | c) Circular |
| Option D:  | d) Rectangular |
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| Q16.  | Which colour are the facultative ponds? |
| Option A: | a) Blue |
| Option B: | b) Green |
| Option C: | c) Brown |
| Option D:  | d) Black |
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| Q17. | Which of the following is not true regarding mechanical aeration? |
| Option A: | a) Increases oxygen |
| Option B: | b) Enhances efficiency |
| Option C: | c) Reduces HRT |
| Option D: | d) Increases HRT |
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| Q18. | Which of the following can act as sanitation technology? |
| Option A: | a) Wet sanitation |
| Option B: | b) Weir sanitation |
| Option C: | c) Environmental sanitation |
| Option D:  | d) Notch sanitation |
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| Q19.  | The bottom of the sewage inlet chamber of septic tank, is provided an outward slope? |
| Option A: | a) 1 in 10 |
| Option B: | b) 1 in 25 |
| Option C: | c) 1 in 30 |
| Option D:  | d) 1 in 50  |
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| Q20. | Septic action is produced by the septic tank by ? |
| Option A: | a) Fungi |
| Option B: | b) Virus |
| Option C: | c) Termites |
| Option D: | d) Anaerobic bacteria  |
|  |  |
| Q21. |  In a house drainage system, the pipe which is used to preserve the water seal of traps is called? |
| Option A: | a) Waste pipe |
| Option B: | b) Soil pipe |
| Option C: | c) Rainwater pipe |
| Option D:  | d) Anti-siphonage pipe |
|  |  |
| Q22.  | \_\_\_\_\_\_\_\_\_ is constructed outside the building to carry wastewater discharge. |
| Option A: | a) Gully trap |
| Option B: | b) P. trap |
| Option C: | c) S. trap |
| Option D:  | d) Floor trap |
|  |  |
| Q23. | What is noise? |
| Option A: | a) Desirable sound |
| Option B: | b) Desirable and unwanted sound |
| Option C: | c) Undesirable and unwanted sound |
| Option D:  | d) Undesirable and wanted sound |
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| Q24.  | Which of the gas is more in percentage in the air? |
| Option A: | a) Oxygen gas |
| Option B: | b) Nitrogen gas |
| Option C: | c) Water vapour |
| Option D:  | d) Carbon dioxide gas |
|  |  |
| Q25. | Following is used for measuring intensity of sound? |
| Option A: | a) Sound level meter |
| Option B: | b) Frequency meter |
| Option C: | c) Manometer |
| Option D:  | d) Simpson meter |