Program: BE CIVIL Engineering

Curriculum Scheme: Revised 2012

Examination: Final Year Semester VII

Course Code: CE-C704 and Course Name: EE-II

Time: 1 hour Max. Marks: 50

What is the wastewater flow in a sewer system during the periods of dry weather with minimum infiltration called		
Wet weather flow		
Dry weather flow		
Wet flow		
Dry flow		
Which of the following factors does the dry weather does not depend on		
Rate of water supply		
Population growth		
Infiltration of groundwater		
Design of sewer system		
An egg-shaped sewer, when compared to a circular sewer is		
Economical		
More stable		
Easier to construct		
Provides better self-cleansing velocity at low discharges		
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The flow in a sewer is		
Pressure flow		
open channel flow		
Laminar flow		
super critical flow		
Self-cleansing velocity in sewer is		
The silting occurs at the bottom		
The scouring occurs at the bottom		
The silting and scouring both occur at the bottom		
Neither silting nor scouring occur at the bottom		
The internal diameter of the sewer should not be less than		
15cm		
25cm		
50cm		

Option D:	75cm		
Q7.	The self-cleansing velocity, recommended for Indian conditions, in order to prevent settling down of a sewage at bottom or on the sides of a large sewer is		
Option A:	0.25ms/s		
Option B:	0.50m/s		
Option C:	0.75m/s		
Option D:	1.5m/s		
Q8.	Which gas is formed as end product for the decomposition of nitrogenous organic matter?		
Option A:	Methane		
Option B:	Sulphur dioxide		
Option C:	Ammonia		
Option D:	Carbon dioxide		
Q9.	What does the BOD value of sewage indicate?		
Option A:	Concentration of non-degradable organic matters in sewage		
Option B:	Concentration of degradable organic matters in sewage		
Option C:	Concentration of inorganic matters in sewage		
Option D:	Concentration of dissolved oxygen present in sewage		
Q10.	How many days BOD value of sewage sample is taken into consideration?		
Option A:	20 days		
Option B:	15 days		
Option C:	10 days		
Option D:	05 days		
Q11.	Where the strong oxidizing agents are used to stabilize the organic matters?		
Option A:	In BOD		
Option B:	In COD		
Option C:	Both in BOD and COD		
Option D:	Neither in BOD nor in COD		
Q12.	How much time is required for COD test?		
Option A:	03 hrs		
Option B:	8 hrs		
Option C:	12 hrs		
Option D:	24 hrs		
Q13.	What is the solid retention time considered while designing the aerated lagoon?		
Option A:	7-8 days		
Option B:	3-6 days		
Option C:	1-2 days		

Option A: 12-36 hours Option B: 4 hours Option C: 10-20 days Option D: 30-60 seconds Ottion B: 20°C Option B: 32°C Option B: 32°C Option D: 38°C Option D: 45°C Option A: 0-3-3 Option A: 0-3-3 Option B: 0.03-0.2 Option B: 0.03-0.2 Option B: 15-30% Option D: 5-7 Option B: 15-30% Option B: 15-30% Option B: 15-30% Option D: 45°C Option B: 15-30% Option D: 5-7 Option B: 15-30% Option C: 30-45% Option D: 45°C Option D: 5-7 Option C: 30-45% Option D: 5-7 Option C: 30-45% Option C: 30-45% Option D: 5-7 Option C: 30-45% Option C: 30-45% Option D: 5-7 Option C: 5-7 Opt	Option D:	10 days		
Option A: 12-36 hours Option B: 4 hours Option C: 10-20 days Option D: 30-60 seconds O15. What is the temperature which should not be exceeded for the reaction in UASB? Option A: 20°C Option A: 20°C Option B: 32°C Option D: 45°C Option D: 45°C Option D: 45°C Option B: 0.3-3 Option B: 0.3-3 Option B: 0.3-3 Option B: 0.3-3 Option C: 3-5 Option D: 5-7 Option A: 0-15% Option A: 0-15% Option A: 0-15% Option B: 15-30% Option B: 15-30% Option D: 60-70% Option A: sedimentation tank Option B: trickling filter Option A: sedimentation tank Option B: trickling filter Option C: sludge digestion tank Option D: dativated sludge plant Option A: waste Option A: waste Option C: fertilizer Option D: building bricks Option C: Factors not affecting sludge digestion is Option A: Temperature Option B: pH Option C: Seeding Option D: atmospheric pressure				
Option B: 4 hours Option C: 10-20 days Option D: 30-60 seconds Option D: 30-60 seconds Option A: 20°C Option B: 32°C Option D: 45°C Option D: 45°C Option A: 0.3-3 Option A: 0.3-3 Option A: 0.3-3 Option B: 5-7 Option D: 5-7 Option B: 15-30% Option C: 30-45% Option C: 30-45% Option D: 60-70% Option B: vickling filter Option C: sludge digestion tank Option D: activated sludge plant Option A: waste Option D: day Option A: operature Option A: vaste Option D: day Option C: operature Option C: fertilizer Option C: fertilizer Option C: Seeding Option D: atmospheric pressure	Q14.	What is the detention period of oxidation pond?		
Option C: 10-20 days Option D: 30-60 seconds Q15. What is the temperature which should not be exceeded for the reaction in UASB? Option A: 20°C Option B: 32°C Option D: 45°C Option D: 45°C Q16. While designing an aeration tank for the ASP what is the volumetric organic loading rate considered? Q16. While designing an aeration tank for the ASP what is the volumetric organic loading rate considered? Option A: 0.3-3 Option B: 0.03-0.2 Option D: 5-7 Q17. What is the percentage of methane produced during sludge digestion? Option A: 0-15% Option B: 15-30% Option C: 30-45% Option D: 60-70% Q18. Which of the following units work on the principle of anaerobic decomposition? Option B: trickling filter Option C: sludge digestion tank Option D: activated sludge plant Q19. Digested sludge is used as Option A: waste Option C: fertilizer Option C: fertilizer Option D: building bricks Q20. Factors not affecting sludge digestion is Option B: PH Option C: Seeding Option D: atmospheric pressure	Option A:			
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Option A:	Option D:	5-7		
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Q20. Factors not affecting sludge digestion is Option A: Temperature Option B: pH Option C: Seeding Option D: atmospheric pressure	Option C:	fertilizer		
Option A: Temperature Option B: pH Option C: Seeding Option D: atmospheric pressure	Option D:	building bricks		
Option A: Temperature Option B: pH Option C: Seeding Option D: atmospheric pressure	Q20.	Factors not affecting sludge digestion is		
Option B: pH Option C: Seeding Option D: atmospheric pressure				
Option C: Seeding Option D: atmospheric pressure	-			
Option D: atmospheric pressure	-			
	-			
Q21. Gully traps used for				
	Q21.	Gully traps used for		

Option A:	Raw water	
Option B:	Sullage	
Option C:	Sewage	
Option D:	Roof drain	
Q22.	Reuse of treated waste water	
Option A:	Gardening, flushing tank car washing etc.	
Option B:	Algal growth	
Option C:	Eutrophication of lakes	
Option D:	Drinking	
Q23.	In Imhoff tank Clear or free zone is known as	
Option A:	Flocculation zone	
Option B:	Sedimentation zone	
Option C:	Digestion zone	
Option D:	Neutral zone	
Q24.	Imhoff tank hopper made with side slope	
Option A:	01:01	
Option B:	02:01	
Option C:	02:02	
Option D:	02:01	
Q25.	Soak pit design based on B.I.S.	
Option A:	IS 2470-1973	
Option B:	IS 10500-1973	
Option C:	IS 10500-1963	
Option D:	IS 2470-1963	

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Question	Correct Option (Enter either 'A' or 'B' or 'C' or 'D')
Q1.	А
Q2.	D
Q3.	D
Q4.	В
Q5.	D
Q6.	А
Q7.	С
Q8.	С
Q9.	В
Q10.	D
Q11.	В
Q12.	А
Q13.	В
Q14.	С
Q15.	С
Q16.	А

Q17.	D
Q18.	С
Q19.	С
Q20.	D
Q21.	D
Q22.	А
Q23.	D
Q24.	А
Q25.	D