

Program: BE CIVIL Engineering
Curriculum Scheme: Revised 2016
Examination: Third Year Semester V

Course Code: CEC504 and Course Name: Environmental Engineering-I

Time: 1 hour

Max. Marks: 50

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

Q1.	The design period of storage reservoir can be given as _____
Option A:	50 yr
Option B:	20 yr
Option C:	30 yr
Option D:	10 yr
Q2.	Most important source of water for public water supply, is from
Option A:	Lakes
Option B:	Ponds
Option C:	Streams
Option D:	Rivers
Q3.	The maximum permissible limit for suspended solids is _____
Option A:	10 mg/l
Option B:	20 mg/l
Option C:	30 mg/l
Option D:	40 mg/l
Q4.	Which of the following statement is wrong regarding permanent hardness
Option A:	It is also called carbonate hardness
Option B:	It is due to the presence of sulfates, chlorides and nitrates of calcium and magnesium
Option C:	It cannot be removed by boiling
Option D:	It requires special methods of water softening to get removed

Q5.	Turbidity in the water is caused due to
Option A:	total solid
Option B:	suspended solid
Option C:	dissolve solid
Option D:	fixed solid
Q6.	The reduction of carbon dioxide by cascade aerators is in the range of _____
Option A:	20-30%
Option B:	40-50%
Option C:	50-60%
Option D:	60-70%
Q7.	The detention period of a rectangular sedimentation tank is given by _____
Option A:	$t = LBH/Q$
Option B:	$t = LB/HQ$
Option C:	$t = Q/LBH$
Option D:	$t = HQ/LB$
Q8.	Detention time for plain sedimentation usually ranges between
Option A:	4-8 hrs
Option B:	4-6 hrs
Option C:	2-4 hrs
Option D:	8-10hrs
Q9.	What is formed when coagulant is added to water?
Option A:	Scum
Option B:	Soap
Option C:	Bubbles
Option D:	Floc
Q10.	The clear distance between the paddles and the wall or the floor of the flocculator tank is about _____
Option A:	5 - 10 cm
Option B:	10 - 20 cm

Option C:	15 - 30 cm
Option D:	20 - 40 cm
Q11.	This coagulant is costlier than alum and generally avoided for treating ordinary public supplies
Option A:	Copperas
Option B:	ferric chloride
Option C:	ferric chloride
Option D:	sodium aluminate
Q12.	Increasing the ____ of water often enhances the effect of coagulant
Option A:	Detention Time
Option B:	Alkalinity
Option C:	Flash mixing
Option D:	Baffles
Q13.	Zeolite process is used for removal of
Option A:	Hardness
Option B:	Colour
Option C:	Odour
Option D:	Acidity
Q14.	Which of the following is not a property of activated carbon?
Option A:	It is impermeable
Option B:	It has many carbon atoms with free valencies
Option C:	It is available in granular as well as powder form
Option D:	It has a prolonged suspension
Q15.	. For removal of manganese from water _____ mg of oxygen is required
Option A:	0.14
Option B:	0.50
Option C:	0.29
Option D:	0.90
Q16.	Loss of head in rapid sand filter is limited to
Option A:	1.5- 2.5 m

Option B:	2.5- 3.5m
Option C:	1-3m
Option D:	3.5 - 5m
Q17.	Slow sand filter can remove turbidity up to
Option A:	10mg/l
Option B:	30mg/l
Option C:	50mg/l
Option D:	75mg/l
Q18.	The length of pressure filter varies from-----to-----M
Option A:	2.5 – 8.0
Option B:	3.5 – 8.0
Option C:	4.5- 10
Option D:	5.5-10
Q19.	Bleaching powder contains the percentage of chlorine
Option A:	80
Option B:	60
Option C:	40
Option D:	30
Q20.	This is not the disinfectant
Option A:	Iodine
Option B:	Fluorine
Option C:	Chlorine
Option D:	Bromine
Q21.	Which of the following is not a classification of traps based on their shape
Option A:	P - trap
Option B:	S – trap
Option C:	Q – trap
Option D:	W – trap
Q22.	What is called for an area surrounding a body of water in which that body of water is subject to?
Option A:	Water cycle

Option B:	Water pumping
Option C:	Watershed
Option D:	RWH
Q23.	What is the db level for heavy vehicles in India
Option A:	70
Option B:	60
Option C:	50
Option D:	80
Q24.	What is the total percentage of nitrogen gas in the air?
Option A:	78 percent
Option B:	12 per cent
Option C:	21 per cent
Option D:	87 per cent
Q25.	Ozone depletion is caused due to
Option A:	CO
Option B:	CFC
Option C:	Methane
Option D:	Hydrogen