Program: CIVIL Engineering
Curriculum Scheme: Revised 2016
Examination: Final Year Semester VIII
Course Code: CEDLO8032 and Course Name: IWT

Q=QUESTION	question_description
A=ANSWER	answer_description
	Module-1
Q	which of the following is not a types of pollutions in Industrial waste water
A	Inorganic Salts
A	Acids & alkalies
A	Organic matters
A	Dissolved oxygen
Q	Which of following is not containes inorganic salts?
A	Organic matters
A	Nitrogen
A	Chloride
A	Carbonates
Q	Which is wrong effluent standard of the following to be discharge on inland surface water bodies (IS 2490-19740)
A	BOD- 30 mg/lit
A	COD -250 mg/lit
A	pH-5.5 – 9
A	Total suspended solids -700 mg/lit
Q	What is the minimum amount of DO required for the life survival of aquatic animals?
A	10 mg/l
A	5 mg/l
A	2 mg/l
A	1 mg/l
Q	What is the type of pollution where the pollutants reach the water body in points called?
A	Point-source pollution
A	Diffuse pollution
A	Point-source contamination
A	Diffuse contamination
Q	For stream classification of class A, how much is dissolved oxygen content in mg/l.
A	2
A	4
A	5
A	6
Q	Which one of the following is the cause of industrial pollution?
A	Modern technologies
A	Efficient waste disposal
A	Efficient government policies
A	Unplanned industrial growth
Q+754:182	Specific gravity of sewage is

A	Zero
A	equal to 1
A	slightly less than 1
A	slightly more than 1
Q	Well oxidised sewage will contain nitrogen largely in the form of
A	Nitrites
A	Nitrates
A	Free ammonia
A	Nitrogen oxide
Q	As per effluent standards, for disposal into the ocean pH value of treated effluent shall be
A	5.5 to 9.0
A	3.0 to 6.5
A	7.5 to 10.5
A	8.5 to 13.5

Q=QUESTION	question_description
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	Module-2
Q	Any individual sample collected without composting or adding other samples is called
A	Composite sample
A	Grab sample
A	Integrate sample
A	Heteroxygeneous sample
Q	Which of the following is the expression of population equivalent
A	BOD of industrial sewage in kg/day * 0.08
A	0.08* BOD of industrial sewage in kg/day
A	BOD of industrial sewage in kg/day+ 0.08
A	BOD of industrial sewage in kg/day / 0.08 kg/person/day
Q	Which of the following is not element of good house keeping
A	Space
A	Storage
A	Ventilation
A	Working area
Q	Which of the following sample give instaneous property of effluent
A	Grab sample
A	Composite sample
A	Integrate sample
A	Hetergenous sample
Q	During which of the following conditions, the deoxygenation is equal to reoxygenation?
A	Stream exposed to atmosphere
A	Increased volume
A	Greener vegetation
A	High temperature
Q	_____ is accomplished by the replenishment of oxygen lost to bacterial degradation of organic waste.
A	Gas transfer
A	Dilution
A	Filtration
A	Re-suspension
Q	In a flowing stream, the breakdown of degradable wastes by bacteria _____ dissolved oxygen.
A	Increases
A	Depletes
A	Maintains
A	Improves
Q	The study which gives whether a wastewater /effluent is subject to a physical, chemical, biological, or thermal treatment process is known as:
A	Treatment Study
A	Treatability Study
A	Bioassay Study

A	Water Quality study
Q	Which test involves the use of live animal or plant or tissues to determine biological activity of a substance?
A	BOD Test
A	Effluent Quality Test
A	Bioassay Test
A	Biological Test
Q	The number expressing the ratio of the sum of the pollution load produced during 24 hours by industrial facilities and services to the individual pollution load in household sewage produced by one person in the same time
A	Population Equivalent
A	Pollution Equivalent
A	Population number
A	Pollution number

Q=QUESTION	question_description
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	Module-3
Q	Dilution method of disposing of sewage is not preferred to
A	When the dilution water is having flow currents
A	When sewage is fresh
A	When diluting water has high dissolve oxygen
A	When diluting water is used for water supply near the point of sewage disposed
Q	Oxygen deficient can be founded out by knowing rates of ,
A	Reoxygenation & reduction
A	Reoxygenation & deoxygenation
A	Reduction & deoxygenation
A	Reduaction
Q	If the depletion of oxygen is found to be 2mg/l after incubating 3ml of sewage diluted to 300 ml at 20^0 C for 5 days then the BOD_5 of the wastewater sample would be
A	200 mg/l
	300 mg/l
	600 mg/l
	100 mg/l
Q	Dissolved oxygen in streams is
A	maximum at noon
A	minimum at noon
A	maximum at midnight
A	same throughout the dayA
Q	If a sewer drain carrying a discharge of 2 m3/s, outfalls into a river carrying a discharge of 10 m3/s, and having DO equal to 8.4 mg/l then the resultant DO of mix will be equal to,
A	5mg/l
A	7 mg/l
A	10. 5 mg/l
A	15 mg/l
Q	In the concept of self purification of natural streams, solution to pollution is
A	Control
A	Reuse
A	Recycle
A	Dilution
Q	The oxygen used by the fish and other aqua life is called?
A	Dissolved oxygen
A	Biological oxygen demand
A	COD
A	SVI
Q	In flowing stream, the breakdown of organic matter by bacteria will lead to which action in dissolved oxygen.
A	Increase
A	Decrease

A	Maintain
A	Improves
Q	The effect of wastewater on water environment is called as which type of effect?
A	Self-purification effect
A	Pollution effect
A	Environmental effect
A	Biological effect
Q	DO level in water should be maintained for aquatic life
A	less than 0.4 mg/l
A	more than 0.4 mg/l
A	more than 4mg/l
A	less than 4mg/l
Q	Algae dies out, though fish life may survive , in a river zone known as:
A	zone of degradation
A	zone of active decomposition
A	zone of recovery
A	clear water zone
Q	If a sewer drain carrying a discharge of 2 cumecs, outfalls into a river carrying a discharge of 10 cumecs and having D.O. equal to 8.4 mg/l, the resultant D.O. of the mix will be equal to:
A	5 mg/l
A	10 mg/l
A	7 mg/l
A	9 mg/l
Q	Which factor does not affect self purification process?
A	Temperature
A	Sunlight
A	Shape of Stream
A	Dilution
Q	After critical point, the rate of re-aeration is _____ than the deoxygenation
A	Equal
A	Lesser
A	Greater
A	Complex
Q	In a flowing stream, the breakdown of degradable wastes by bacteria _____ dissolved oxygen.
A	Increases
A	Depletes
A	Maintains
A	Improve
Q	The impact of pollution depends upon nature of the pollutants and the _____
A	Toxic contaminants
A	Season
A	Contaminants

A	Characteristics of river
Q	When the deoxygenation rate exceeds the reoxygenation rate, the oxygen sag curve shows _____ in a deficit of oxygen.
A	Increase
A	Decrease
A	Constant
A	Same
Q	The impact of pollution depends upon nature of the pollutants and the _____
A	Toxic contaminants
A	Season
A	Contaminants
A	Characteristics of river
Q	When the deoxygenation rate exceeds the reoxygenation rate, the oxygen sag curve shows _____ in a deficit of oxygen.
A	Increase
A	Decrease
A	Constant
A	Same
	Ultimate BOD of a given wastewater depends upon it's
	temperature
	initial organic matter
	flow velocity
	inorganic matter

Q=QUESTION	question_description
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	Module-4
Q	Which unit remove roots, sticks, cans, branches,racks etc. from waste water.
A	Degritting
A	Praeration
A	Screening
A	Sedimention
Q	The aim of Aerobic & Anaerobic processes is to convert,
A	non settleable organic matter into settleable organic matter
A	settleable organic matter into non settleable organic matter
A	non settleable organic matter to suspended matter
A	suspended matter to organic matter
Q	What type of settling tank typically follows the biological treatment step.
A	Preliminary treatment
A	Primary treatment
A	Secondary treatment
A	Tertiary treatment
Q	Heavy inorganic material in waste water such as sand, eggshells, gravel,cinders etc. are called,
A	Sluge
A	Grit
A	Fats
A	Substract
Q	Kennison nozzle is fitted to
A	Open channel flow measurement
A	Close conduit flow measurement
A	Preaeration
A	Aeration
Q	UASB stands for,
A	Upflow aerobic sludge blanket
A	Upflow aerobic sedimentation blanket
A	Underflow anaerobic sludge blanket
A	Upflow anaerobic sludge blanket
Q	Chlorination of waste water is used at which stage of treatment
A	Preliminary treatment
A	Primary treatment
A	Secondary treatment
A	Tertiary treatment
Q	The residual, semi solid material that is produces as a by product during sewage treatment of industries is called as,
A	Sludge
A	Solids
A	Compost
A	Ash
Q	Septic tank is a combination of
A	Screening & digestion tank

A	Screening & degritting unit
A	Screening & degritting unit
A	Floatation & degritting unit
Q	The process of converting waste into compost is called as
A	Incineration
A	Low lying filling
A	Composting
A	Burial
Q	What is first step in sludge treatment process
A	Phosphorous recovery
A	Digestion
A	Dewatering
A	Thickening
Q	Which of the following method is used in rural communities?
A	Aerobic digestion
A	Mechanical dewatering
A	Dewatering
A	Composting
Q	Out of the below given methods in which of these organic matters is stabilized?
A	Sludge drying bed
A	Filter press
A	Centrifuge
A	Sludge lagoons
Q	What is the maximum temperature up to which conditioning can be conducted?
A	50 degree
A	70 degree
A	60 degree
A	40 degree
Q	Which of the following is true for screens and comminutors?
A	Unit operation
A	Unit process
A	Chemical treatment
A	pH balancer
Q	_____ occur when the rate of oxygen transfer from the lagoon surface is less than the rate of oxygen consumption in the lower levels of the lagoon.
A	Temperature rise
A	Objectionable odour
A	Raised pH
A	Temperature fall
Q	_____ weather requires large oxygen transfer.
A	Cold
A	Warm
A	Rainy
A	Normal
Q	What is the maximum allowable temperature in facultative ponds?
A	15˚C
	20˚C
	25˚C

	30˚C
Q	What is the shape of the oxidation ditch?
A	Square
A	Rectangular
A	Circular
A	Oval
Q	Which of the following is MLSS concentration not dependant upon?
A	Surface area of sedimentation
A	Rate of return sludge
A	Aeration process
A	Number of bar screens
Q	_____ uses anaerobic digestion.
A	Incineration
A	Combustion
A	Fermentation
A	Oxygenation
Q	What is biogas composed of?
A	O2 and CO2
A	CO2 and NO2
A	CH4 and O2
A	CH4 and CO2
Q	. _____ is used for ultrafiltration.
A	Permeable membrane
A	Highly permeable membrane
A	Semi-permeable membrane
A	Non-permeable membrane
Q	Which of the following is a tertiary filtration?
A	Coagulation
A	Sand filtration
A	Flocculation
A	Sedimentation
Q	Micro-organisms adhering to the membrane surface forming a gel layer is called _____
A	Scaling
A	Biofilm
A	Gel layer
A	Barrier

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	Module-5
Q	Which of the following is not pollution characterstics of tannery?
A	Strong colour
A	High phenal content
A	Presences of sulphids
A	High BOD
Q	What is the pH value of distillering wastewater?
A	6.5
A	7.2
A	5.7
A	3.8
Q	Which of the following is not chemical characterstics of liquid waste from industry
A	COD
A	pH
A	Temperature
A	Nitrogen
Q	Which of the following is a advantages of reuse of treted wastewater
A	Increase the demand of fresh water
A	Reduce environment impact
A	Use for drinking purpose
A	Increase treatment cost
Q	What is mechanical pulping?
A	Wood is separated or defbrated into pulp
A	Extraction of collelose from wood
A	Wood fibers are brought into a circular tank
A	Timbers are chipped into small pieces
Q	What is COD range of combined waste in sugar mill industry?
A	50-200 mg/l
A	6500-9000 mg/l
A	4000-6384 mg/l
A	600-4380 mg/l
Q	Which of the following process is tertiary treatment of textile mill waste
A	Equalization
A	Ion exchange
A	Anaerobic digestion
A	Aerated lagoon
Q	Total chromium present in cotton textile mill waste is
A	4-5 mg/l
A	6.5-8.5 mg/l
A	10-13 mg/l
A	15-17.5 mg/l
Q	The sulphate process is also known as
A	Crushing process
A	Kraft digestion

A	Chemical process
A	Blendiry process
Q	Treatment dairy industry waste doses not involves
A	Neutralization
A	Screening process
A	Equalization process
A	Sedimentation process
Q	Which of the following is not source of waste water in tannery?
A	Soaking
A	Timing
A	Flushing
A	Fleshing
Q	Which of the following is disadvantages of reuse of treated waste water
A	Improvement of soil properties
A	Conservation of fresh water
A	Some subtances are toxic for plants
A	Decrease use of synthetic fertilizers
Q	In case of cotton textile industry, process of desizing will not remove which compounds.
A	Size
A	Starch
A	Ammonia
A	Sodium silicate
Q	Which of the following method will be included in secondary treatment of textile waste-water.
A	Equalization
A	Sedimentation
A	Neutralization
A	Aerated lagoons
Q	The effluent discharged from dairy industry is characterized by
A	High BOD
A	High PH
A	Low turbidity
A	Low BOD

Q=QUESTION	question_description
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	Module-6
Q	Which step is deciding factor to suggest whether EIA is required?
A	Analysis
A	Prediction of Impact
A	Planning
A	Screening
Q	Which projects would not be considered in screening phase.
A	Nuclear project
A	Thermal project
A	Emergency project
A	Cement plants
Q	How many steps are carried out in an environmental audit?
A	4
A	3
A	5
A	2
Q	What type of work is done at post audit activites?
A	Analysis & conclusion
A	Evaluation
A	Collection of information
A	Monitoring
Q	Which component unit is not included in CETP?
A	Settling
A	Coagulation
A	Filtration
A	Flocculation
Q	Some of the important legislation for environment protection are as follows:
A	The National Green Tribunal Act, 2010
A	The Hazardous Waste Management Regulations, etc
A	The Air (Prevention and Control of Pollution) Act, 1981
A	The Air (Prevention and Control of Pollution) Act, 1972
Q	The Environmental (Protection) Act was enacted in the year:
A	1986
A	1992
A	1984
A	1974
Q	The main aim of undertaking an EIA for a project is to ensure that the project is planned adequately therefore environmental impacts are minimized. All of this can be achieved by:
A	Identifying all possible environmental impacts
A	Developing assessment program
A	Evaluating various projects option
A	Developing various projects option
Q	Which of the following item is not including in Environmental Audit

A	Pollution Monitoring Scheme
A	Developing assessment program
A	Evaluating various projects option
A	Developing various projects option
Q	Which among the following is correct as to Environmental Audit
A	Environmental audit is different from the audit approach practiced by the SAI
A	It is an systematic process of obtaining and evaluating information about environmental aspects
A	The criteria is based on local, national standards but not on global standards
A	Environmental audit is different from the audit approach practiced by the IAS
Q	Advantages of Private sector ownership CETP
A	Commitment to pollution control by the industries.
A	Quantity on which the cost of treatment depends.
A	There could be conflict among the industries about the wastewater
A	Quality on which the cost of treatment depends
Q	Drawback of Private sector ownership CETP
A	Commitment to pollution control by the industries
A	Short term problems of the manpower and equipment can be solved by participating industries
A	Failure of pay may result in not allowing this industry to discharge wastewater
A	Assured wastewater treatment hence better control over pollution
Q	About the Environmental impact assessment (EIA) it is true to say that:
A	It is a procedure that ensures that the environmental implications of decisions are taken into account when there are evidences of environmental impact in the progress of an activity.
A	It is a procedure that ensures that the environmental implications of decisions are taken into account after the environmental agency grants a permit.
A	It is a procedure that ensures that the environmental implications of decisions are taken into account before the decisions are made.
A	It is a procedure that ensures that the environmental implications of decisions
Q	Considering the EIA Directive preamble, which of the following sentences is correct?
A	A development consent specific for public and private projects which are likely to have significant effects on the environment should be granted only after prior assessment of the likely significant environmental effects of these projects has been carried out.
A	The assessment of the likely significant environmental effects must be conducted on the basis of the appropriate information supplied by the national environmental authority.
A	The assessment of the likely significant environmental effects may be supplemented by the authorities and by the public in general.
A	The assessment of the likely significant environmental effects may be supplemented by the authorities and not by the public in general.
Q	What is the purpose of the project screening, according to the EIA Directive?
A	The project screening helps to identify which projects require an EIA.
A	The project screening determines the type of EIA which is required for each and every project

A	The project screening is the last stage of the EIA process in which inspections take place.
A	The project screening is the last stage of the EIA process in which inspections not take place.