

**BCS508** 

USN

Question Paper Version : A

## Fifth Semester B.E./B.Tech. Degree Examination, Dec.2024/Jan.2025 Environmental Studies and E – Waste Management

Time: 1 hr.]

[Max. Marks: 50

## INSTRUCTIONS TO THE CANDIDATES

- 1. Answer all the **fifty** questions, each question carries one mark.
- 2. Use only Black ball point pen for writing / darkening the circles.
- 3. For each question, after selecting your answer, darken the appropriate circle corresponding to the same question number on the OMR sheet.
- 4. Darkening two circles for the same question makes the answer invalid.
- 5. Damaging/overwriting, using whiteners on the OMR sheets are strictly prohibited.
- Which of the following conceptual spheres of the environment is having the least storage capacity for matter?
   a) Atmosphere
   b) Lithosphere
   c) Hydrosphere
   d) Biosphere
- 2. The ratio between energy flows at different points in a food chain is known as
  - a) Ecological capacity

- b) Ecological efficiencyd) Ecological potential
- c) Ecological assimilation

## 3. A predator is

- a) An animal that is fed upon another animal
- b) Animal that feeds upon both plants and animals
- c) An animal that feeds upon another animal
- d) A primary consumer

## 4. Why Rann of Kutch attracts aquatic birds in monsoon season?

- a) Because desert land is converted to forest land
- b) Because desert land is converted to snow
- c) Because desert land do not convert

a) Tropical Evergreen forests

- d) Because desert land is converted to salt marshes
- 5. Which kind of soil we can find on the surface of Thar desert?a) Rockyb) Moistc) Fertiled) Aeolian
- 6. Which of the following type of forest important for watersheds?
  - b) Tropical Deciduous forests
  - c) Tropical Montana forests d) Grassland forest

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7.	Hot spots areas have	1.)	Only and an garad	nlan	to
	a) Low density of biodiversity	b)	Only endangered	-	
	c) High density of hot springs	d)	High density of bi	louin	reisity
0	Sustainable Development means		Vy-		
8.	a) meeting present needs without comprom	ising	on future needs		
	b) progress of human beings	iisiiie	5 on future needs		
	<ul><li>c) balance between human needs and the al</li></ul>	hility	of earth to provide	the	resources
	d) all of these	onney	or currie to provide	Saul	
	d) an of these				
9.	The term Alpha diversity refers to				
	a) Genetic diversity	b)	Community and ec	osys	stem diversity
	c) Species diversity within a community or	eco	system		
	d) Diversity among the plant				
10.	Algae, green plants and photosynthetic bac			•	
	a) Autotrophic (b) Heterotrophic	c)	Decomposers	d)	Consumers
11	Vold type grosslands are located at	and the second			
11.	Veld type grasslands are located at a) South Africa b) South America		Australia	d)	Britain
	a) South Anea b) South America	0)	Australia	u)	Dinam
12.	Which pyramid is always upright?				
	a) Energy b) Biomass	c)	Numbers	d)	Food chain
13.	In what form is solar energy is radiated from				
	a) Ultraviolet Radiation	/	Infrared Radiation		
	c) Electromagnetic waves	d)	Transverse waves		
14	What do as MID stands for in the anarou fi	142			
14.	What does MHD stands for in the energy final Magneto Hydro Dynamic	b)	Metal Hydrogen I	)eto:	v
	c) Micro Hybrid Drive	d)	Metering Head Di		
	c) Micro Hybrid Drive	u)	Metering field Di	non	
15.	The 'Miracle Material' that can turn CO <sub>2</sub> in	nto li	quid fuel is :		
	a) Propane b) Copper		Graphene	d)	Potassium
		,			
16.	A tide whose difference between high and l				
	a) Diurnal tide b) Neap tide	c)	Spring tide	d)	Ebb tide
-		2	1 1		
17.			Gorlov turbine	4)	Francis turbine
	a) Pelton wheel b) Kaplan turbine	0)	Gonov turbine	u)	Francis turonic
18.	Which type of fuel is removed from the	read	ctor core after read	ching	g end of core life
10.	service?				
	a) Burnt fuel b) Spent fuel	c)	Engine oil	d)	Radioactive fuel
			0	/	
19.	What is a fuel cell?				
	a) Converts heat energy to chemical energy				
	b) Converts heat energy to electrical energy				
	c) Converts chemical energy to electrical e	energ	gy		
	d) Converts kinetic energy to heat energy				
	< "		2 - 6 5		
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20.	Which one of the following is the apex pollution control?	org	anization in our co	ounti	ry in the field of
	<ul><li>a) Water Pollution Control Board</li><li>c) Central Pollution Control Board</li></ul>	b) d)	State Pollution Co Air Pollution Cont		
31	is second has detailed a sector high in a		VY .		
21.	is caused by drinking water high in r a) Cholera		Kidney problem		4
	c) Liver problem		Methomoglobinem	ia	entale
		u)	Wiethomogloomen		Y
22.	Bhopal gas tragedy took place in the year _		and the gas respons	ible	was
	a) 1964, Hydrogen fluoride		1974, Methyl chlor		
	c) 1984, methyl ISO – cyanide		1994, Methyl sulp		
•••			1		
23.	The major chemical pollutants in photochem			0	DAN
	a) NO, NO <sub>2</sub> , VOC, O <sub>3</sub> , PAN		$N_2O$ , $NO_2$ , $VOC$ ,		
	c) NO, NO <sub>2</sub> , VOC, O <sub>2</sub> , PAN	d)	NO, $N_2O_5$ , VOC,	$O_{3}$ ,	PAN
24.	The international protocol to protect the Oz	one	laver is		
	a) Vienna protocol		Kyoto protocol		
	c) Cartagena protocol		Montreal protocol		
			1 1 2 0 11		1' ' 0
25.	Which is the best and the worst method of j				dispersion?
	a) Lofting and fumigation		Trapping and fann	-	
	c) Conning and fumigation	d)	Fanning and Loft	ng	4
26.	What is called for a Temporary hearing loss	s?	14	190	den
	a) Temporary ear pain	b)	Temporary hearin	g pr	oblem
	c) Temporary threshold shift	d)			
	N71 / / / / / / / / / / / / / /	2			
27.	What timings loud speakers shouldn't use i				
	a) 10.00 pm to 5.00 am c) 1.00 am to 7.00 am	~	11.00 pm to 6.00 a		
	c) 1.00 am to 7.00 am	d)	10.00 pm to 6.00	am	
28.	In which section, if a person violates the no	oise	pollution regulation	s,is	s liable for penalty
	according to Environmental Protection Act	, 198	36.		
	a) Section 12 b) Section 15	c)	Section 18	d)	Section 19
29.					
	"Minemate Disease" is appead due to	de comp			
29.	'Minamata Disease'' is caused due to		Mercury	d)	Cadmium
<b>2)</b> .	<ul><li>'Minamata Disease'' is caused due to</li><li>a) Lead</li><li>b) Arsenic</li></ul>	c)	Mercury	d)	Cadmium
30.	a) Lead b) Arsenic		2		Cadmium
	A W		2		Cadmium
	<ul><li>a) Lead</li><li>b) Arsenic</li><li>The process of reducing the fluoride conternation</li></ul>	nt fro	m water is called as		Cadmium
30.	<ul> <li>a) Lead</li> <li>b) Arsenic</li> <li>The process of reducing the fluoride conternal</li> <li>a) Chlorination</li> <li>c) Defluoridation</li> </ul>	nt fro b) d)	m water is called as Fluoridation Fanning and Loftin	ng	
	<ul> <li>a) Lead</li> <li>b) Arsenic</li> <li>The process of reducing the fluoride contertal</li> <li>a) Chlorination</li> <li>c) Defluoridation</li> <li>What is the Dissolved oxygen value required</li> </ul>	nt fro b) d) ed fo	m water is called as Fluoridation Fanning and Loftin r the survival of aqu	ng atic	species?
30.	<ul> <li>a) Lead</li> <li>b) Arsenic</li> <li>The process of reducing the fluoride conternal</li> <li>a) Chlorination</li> <li>c) Defluoridation</li> </ul>	nt fro b) d) ed fo	m water is called as Fluoridation Fanning and Loftin	ng atic	
30. 31.	<ul> <li>a) Lead</li> <li>b) Arsenic</li> <li>The process of reducing the fluoride conternal Chlorination</li> <li>c) Defluoridation</li> <li>What is the Dissolved oxygen value required a) 7 mg/L</li> <li>b) 8.2 mg/L</li> </ul>	nt fro b) d) ed fo c)	m water is called as Fluoridation Fanning and Loftin r the survival of aqu 6.5 mg/L	ng latic d)	species? 4 mg/L
30.	<ul> <li>a) Lead</li> <li>b) Arsenic</li> <li>The process of reducing the fluoride conternal Chlorination</li> <li>c) Defluoridation</li> <li>What is the Dissolved oxygen value require a) 7 mg/L</li> <li>b) 8.2 mg/L</li> <li>Which among the following is used to dum</li> </ul>	nt fro b) d) ed fo c) p the	m water is called as Fluoridation Fanning and Loftin r the survival of aqu 6.5 mg/L	ng latic d) the c	species? 4 mg/L
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33.	<ul> <li>Which type of waste includes items such as leftover food, fruit peels and yard trimmings?</li> <li>a) Hazardous waste</li> <li>b) Organic waste</li> <li>c) Bio – medical waste</li> <li>d) Electronic waste</li> </ul>
34.	Which of the integrated waste management is reduced on an individual level?a) Source Reduction b) Recyclingc) Disposald) Burning
35.	<ul><li>What is called for the process of burning municipal solid waste in a properly designed furnace under suitable temperature and operating conditions?</li><li>a) Landfill</li><li>b) Recycling</li><li>c) Vermicomposting</li><li>d) Incineration</li></ul>
36.	The process of decomposition of biodegradable solid waste by earthworms is calleda) Landfillb) Vermicomposting c) Compostingd) Shredding
37.	is a liquid that passes through solid waste and extracts suspended impurities from it a) Leachate b) Sludge c) Distilled water d) Municipal
38.	The colour code of plastic bag for disposing of microbial laboratory culture wastea) blackb) redc) blued) white
39.	Average hospital waste produced per bed per day in Government hospital is a) 1.5 to 2 kg b) $0.5 - 4$ kg c) $0.5$ to 1 kg d) $0.5 - 2$ kg
40.	<ul> <li>Which of the following are the main contributors of the e –waste in the world?</li> <li>I. Refrigerators / freezers, washing machines, dishwashers.</li> <li>II. Small household appliances</li> <li>III. Personal computers, telephones, laptops, printers.</li> <li>IV. Gas cylinders, chimneys and home appliances</li> <li>a) Only I, II, III b) Only I &amp; II c) Only I, III, IV d) All of these</li> </ul>
41.	<ul> <li>What is Extended Producer Responsibility (EPR) as per the e – waste management rules in India?</li> <li>a) The responsibility of consumer to manage e – waste</li> <li>b) The responsibility of manufactures to manage e – waste throughout the product life cycle</li> <li>c) The responsibility of retailers to manage e – waste disposal</li> <li>d) The responsibility of informal recyclers to manage e – waste.</li> </ul>
42	<ul> <li>Which international agreement regulates the transboundary movements of hazardous waste, including e – waste?</li> <li>a) Kyoto Protocol</li> <li>b) Paris agreement</li> <li>c) Montreal Protocol</li> <li>d) Basel convention</li> </ul>
43	a) Blue b) Green c) Yellow d) Black
44	<ul> <li>What are the health hazards which can be caused by E – waste?</li> <li>a) Lung cancer</li> <li>b) DNA damage</li> <li>c) Brain</li> <li>d) All of these</li> </ul>
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45.	<b>45.</b> Preparation of Guidelines for Environmentally sound Management of e – waste is a duty assigned to				
	a) Producer	b) Consumer	c) MOEFCC	d) SP CB/PCC	
46.	What is India's globa a) 3	al rank in e –waste? b) 13	c) 23	d) 33	
		· · · · · · · · · · · · · · · · · · ·	,	Con la construction de la constr	
47.	water pollution const	tituted?		revention and control of	
	a) 1974	b) 1978	c) 1982	d) 1986	
48.	Aerosol consisting of a) Mist	f liquid droplets is cal b) Dust	led as c) Fog	d) Aerosol	
49.			ce of water pollution?	<u>^</u>	
4),	a) Factories		b) Sewage treatme	ent plant	
	c) Urban and subu	- p	d) All of these		
50.	When is World Wate a) January 26 <sup>th</sup>	b) June 5 <sup>th</sup>	c) September 22 <sup>nd</sup>	d) March 22 <sup>nd</sup>	
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