Module Name : MSc Environmental Sciences-E Exam Date : 20-Sep-2020 Batch : 16:00-18:00

Sr. No.	Client Question ID	Question Body and Alternatives	Marks	Negative Marks
Object	ive Ouestion			
1	1	Thermal power generation in India is carried out by burning	4.0	1.00
		A1 Natural gas		
		A2 Coal		
		A3 Oil		
		A4 Petrol :		
Object	ive Ouestion			
2	2	Polar satellite orbit above the earth at about	4.0	1.00
		A1 10 km above the earth		
		A2 20 km above the earth		
		A3 50 km above the earth		
		A4 100 km above the earth		
Object	iva Quastian			
3	3	Species diversity show a marked pattern as one moves from equator to the poles. Species diversity:	4.0	1.00
		A1 increases as one moves towards the poles from the equator :		
		A2 decreases as one moves from equator to the poles		
		A3 remain constant as one moves from the equator to the poles :		
		A4 is highest in the Arctic and Antarctic region		
Object	ive Question			
4	4	Coral reefs are mainly distributed globally in:	4.0	1.00
		A1 Temperate waters		

		A2 : Tropical waters		
		A3 Antartic waters		
		A4 : Arctic waters		
Object	tive Ouestion			
5	5	Which among the following are the best tools/techniques to study landscape fragmentation? I Remote sensing II. Geodesy III. Cartography IV. Geographical Information System Choose the correct answer	4.0	1.00
		A1 I and II only		
		A2 I, III and IV only		
		A3 II, III and IV only		
		A4 : I, II, III and IV		
Object	tive Question			
6	6	Water entrapped at the time of formation of the sedimentary rocks is called:	4.0	1.00
		A1 : Meteoric water		
		A2 : Ground water		
		A3 : Connate water		
		A4 Juvenile water		
Object	tive Question			
7	7	BOD of the effluent discharged on land for irrigation should not exceed	4.0	1.00
		A1 30 mg/l		
		A2 100 mg/l		
		A3 300 mg/l		
		A4 : 60 mg/l		

Objectiv

8	8	An ocean wave has a height of 3 m and has time period of 10 sec. The power quailable for extraction from this wave in the	4.0	1.00
		units of kW per meter of the wavefront is approximately:		1.00
		A1 30		
		A2 60		
		A3 90 :		
		A4 120		
Object	tive Question			
9	9	In the case of Silicon solar cell (Eg. = 1.12 eV), the maximum wavelength of solar radiations for production of electron-hole pairs is:	4.0	1.00
		A1 -560 nm		
		A2 : -720 nm		
		A3 -480 nm		
		A4 -1100 nm		
Object	tive Question			
10	10	Which one of the following is not a biofertilizer?	4.0	1.00
		Al Aquatic ferns		
		A2 Blue-green algae		
		A3 Phosphate-Solubilizing micro-organisms		
		A4 Vermicompost		
Object	tive Question			
11		Which of the following air pollutants are released by thermal power plants? I Oxides of nitrogen II. Oxides of sulphur III. Ammonia IV. Carbon monoxide Choose the correct answer	4.0	1.00
		A1 I, III and IV only		
		A2 II and III only :		

A3 I, II and IV only :

A4 I, II, III and IV

Object	ive Question			
12	12	When DDT enters the human body, it is:	4.0	1.00
		A1 water soluble and easily excreted in urine		
		A2 processed by enzymes and becomes a different compound which is toxic		
		A3 : stored in the bones		
		A4 fat soluble and stored in fat tissues		
Object	ive Question			
13	13	Given below are two statements. One labelled as Assertion (A) and the other labelled as Reason (R). Assertion (A): Methanogenic archae (methanogens) grow in swamps and sewage: Reason (R): Methanogens are obligate anaerobes. Choose the correct answer:	4.0	1.00
		A1 Both (A) and (R) are correct and (R) is the correct explanation of (A):		
		A2 Both (A) and (R) are correct and (R) is not the correct explanation of (A)		
		A3 : (A) is true, but (R) is false		
		A4 : (A) is false, but (R) is true		
Object	ive Question			
14	14	In an ecological succession there is a progressive change in biological community over time and space	4.0	1.00
		A1 Old species are replaced by new one		
		A2 : Old species evolved into new species		
		A3 : New species moves in displacing previous one		
		A4 Each stage there is a modification in the environment to adopt new species		
Object	ive Question			
15	15	In ADS – PAGE:	4.0	1.00
		A1 Polymeric proteins are not only converted into monomers, but monomers are also denatured by SDS		

		:		
		A2 Polymeric proteins converted into monomeric units, but monomers are not denatured		
		A3 SDS do not have any negative impact on native structure of monomers		
		A4 Polymeric proteins are retained as single unit		
Object	tive Ouestion			
16	16	Elemental carbon influences the regional climate because:	4.0	1.00
		$\stackrel{A1}{:}$ It influences the radiative flux in the atmosphere due to its absorbing properties		
		A2 : It reacts with other pollutants		
		A3 It coagulates with other atmospheric pollutants		
		A4 Its concentration is usually more in the atmosphere		
Object	tive Question			
17	17	To determine the cation-exchange capacity, it is necessary to calculate the total positive charge associated with ions like:	4.0	1.00
		$\stackrel{A1}{:} Ca^{2+}, Mg^{2+}, K^+, Na^+$		
		$\stackrel{A2}{:} Ca^{2+}, Mn^{2+}, Fe^{3+}, Cr^{3+}$		
		$\stackrel{A3}{:} Mg^{2+}, Fe^{3+}, Ni^{2+}, Cd^{2+}$		
		$\stackrel{A4}{:}$ K ⁺ , BO ²⁺ , Pb ²⁺ , Hg ²⁺		
Object	tive Question			
18	18	Match the List I and List II. Identify the correct answer from the codes given below the lists	4.0	1.00
		List IList II(Organism)(Interaction)(a) Albugo and India mustard(i) Symbiosis(b) Penicillium and Staphyllococcus(ii) Ammensalism(c) Lichens(iii) Commensalism(d) Barnacles and whales(iv) Parasitism		
		A1 : (a)-(i), (b)-(ii), (c)-(iii), (d)-(iv)		
		A2 (a)-(iii), (b)-(iv), (c)-(i), (d)-(ii)		
		A3 (a)-(ii), (b)-(i), (c)-(iv), (d)-(iii)		

		A4 : (a)-(iv), (b)-(ii), (c)-(i), (d)-(iii)		
Object	tive Question			
19	19	The set of processes by which soil and rock are loosened and move downhill are called:	4.0	1.00
		A1 Erosion		
		A2 Abrasion		
		A3 Saltation		
		A4 Weathering		
Object	tive Question			
20	20	pH of 1 mM HCl is :	4.0	1.00
		A1 1 :		
		A2 2		
		A3 3		
		^{A4} 11		
06ject	1ve Question		4.0	1.00
21	21	who proposed that succession is not orderly and directional but is heterogeneous?	ч.0	1.00
		Al Clements		
		A2 Egler		
		A3 Tansley		
		A4 Reiter		
Object	tive Question			
22	22	Cement dust is characterized by very fine particulates. Which of the following air pollution control devices is appropriate for removing them from hot exhaust gases emanating from cement kiln?	4.0	1.00
		Al Cyclnes		
		A2 : Baghouse		

		A3 Electrostatic precipitator : A4 Venturi scrubber :		
)bjec	ctive Question		4.0	1.00
23	23	EIA of Port and Harbour projects involve impact assessment on: I. Biological environment II. Air environment IV. Social environment Choose the correct answer: Al x	4.0	1.00
		: I only		
		A2 II only		
		A3 III only		
		A4 : I, II and IV only		
Objec	ctive Question			
		Match the List I and List II. Identify the correct answer from the codes given below the lists List I List I List I (Tests) (Application) a) Z-test (i) Judging the significance of differences between means of two small samples b) t-test (ii) Judging the significance of mean, median, mode c) Chi-square test samples d) F-test (iii) Compare sample variance to a theoretical population variance A1 (a)-(i), (b)-(ii), (c)-(iii), (d)-(iii) A3 (a)-(ii), (b)-(ii), (c)-(i), (d)-(iii) A4 (a)-(iv), (b)-(ii), (c)-(i), (d)-(iii) List II (Tests) (Iii) List II (Iii) (Iiii) (Iii) (Iiii) (Iii) (Iii) (Iii) (Iii		
)bjec	ctive Question			
25	25	Landslide hazard in the Himalayan region are the consequence of: I. Road cutting II. Seismic activity III. Deforestation IV. Urbanization Choose the correct answer Al . I, II and III only	4.0	1.00

		A2 I and III only		
		A3 I and II only		
		A4 I, II, III and IV		
Object	tive Question			
26	26	Which radiative element is considered as an indoor pollutant?	4.0	1.00
		Al Oxygen – 18 :		
		A2 : Nitrogen – 15		
		A3 Carbon – 13		
		A4 Radon		
Object	tive Question			
27	27	The rate of biogenetic nutrients between the abiotic and biotic components of an ecosystem is often referred to as:	4.0	1.00
		A1 Turn over rate		
		A2 Production rate		
		A3 Standing state		
		A4 Cycling rate		
Object	tive Question			
28	28	Which of the following is the <i>in-situ</i> biodiversity conservation site?	4.0	1.00
		A1 Botanical garden		
		A2 :		
		A3 Biosphere reserve		
		A4 Orchidarium		
Object	tive Question			

A1 Coal :	
A2 : Uranium	
A3 Hydrogen	
A4 : Water	

Objective Question	
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30	30	Blue baby syndrome is caused due to intake of water high in	4.0	1.00
		A1 Ammonia		
		A2 : Nitrates		
		A3 Sulphates		
		A4 Sulphides		
Object	tive Question			
31	31	Which of the following ranges of scale lengths represents meso-scale motions in atmosphere?	4.0	1.00
		A1 30 km – 400 km		
		$\frac{A2}{2}$ 500 m – 10 km		
		$\frac{A3}{2} 1 \text{ km} - 2 \text{ km}$		
		$\frac{A4}{2}$ 100 m – 1 km		

Objective Question

object	are Question			
32	32	Beer-Lambert's law defines	4.0	1.00
		A1 The degree of absorption of monochromatic light by a homogeneous medium		
		A2 Atomic absorption spectrophotometry		
		A3 Atomic emission spectrophotometry		
		A4 Gas chromatography		
Object	tive Question			

33	33	Given below are two statements. One labelled as Assertion (A) and the other labelled as Reason (R). Assertion (A): Shade loving species show better natural regeneration under highly disturbed condition. Reason (R): Heliophilic species needs more exposure to light for better natural regeneration. In the context of the two statements, which one of the following is correct? A1 Both (A) and (R) are correct and (R) is the correct explanation of (A) : Both (A) and (R) are correct and (R) is not the correct explanation of (A) : A3 : A4 : A4 :	4.0	1.00
Objec 34	tive Question	Which and of the following any may work under strict anorrabic conditions to fix atmospheric nitrogen?	4.0	1.00
54		Al Nitrate reductase	4.0	1.00
		A2 Nitrite reductase		
		A3 Transaminase :		
		A4 Nitrogenase		
Objec	tive Question			
35	35	Which of the following is/are produced during fermentation? I. Ethanol II. Citrate III. Lactate IV. Succinate Choose the correct answer from the codes given below: Al i I only	4.0	1.00
		A2 : I and II only		
		A3 I and III only		
		A4 II and IV only :		
Objec	tive Question			
36	36	Indian Remote Sensing satellite (IRS 1C) contains	4.0	1.00
		Al One sensor		
		A2 Two sensors		

		A3 Three sensors		
		A4 Four sensors		
Object	tive Question			
37	37	What is a band in remote sensing?	4.0	1.00
		A1 : A range of electromagnetic radiation		
		A2 : Infrared		
		A3 Visible light		
		A4 : Optical filter		
Object	tive Question			
38	38	When soil becomes liquid at its melting point, the entropy	4.0	1.00
		Al increases		
		A2 : decreases		
		A3 zero		
		A4 remains unaltered		
Object	tive Question			
39	39	Earth summit of Rio de Janeiro (1992) resulted in	4.0	1.00
		Al Compilation of Red list		
		A2 Establishment of Biosphere Reserve		
		A3 Conservation of Biodiversity		
		A4 IUCN		
Object	tive Question			
40	40	Eutrophic lakes are characterized by	4.0	1.00
		A1 High Nutrients and high productivity		

		A2 High Nutrients and low productivity :						
		A3 : Low Nutrients and high productivity						
		A4 : Low Nutrients and low productivity						
Object	ive Question							
41	41	What is the term for a collection of similar ecosystems?	4.0	1.00				
		A1 : ecosystem						
		A2 ecotone						
		A3 : biome						
		A4 community						
Object	Dejective Question							
42	42	"Mammals of cold regions show tendency to have shorter extremities than in warmer regions" this statement is called as	4.0	1.00				
		A1 : Gloger rule						
		A2 : Allen's rule						
		A3 Jordan rule						
		A4 Renche's rule						
Object	ive Question							
43	43	Which of the following statements best describes the work done by decomposers?	4.0	1.00				
		A1 They prevent the escape of energy						
		A2 They provide nitrogen for plants by taking it from the soil or water :						
		A3 : They release carbon from decayed bodies in the form of carbon dioxide						
		A4 : They create new source of oxygen						
Object	ive Question							
44	44	In India, Crocodile breeding project started for the first time in	4.0	1.00				
		A1 Tamil Nadu						

A2 : : : :	
A3 : Odisha	
A4 : Goa	

Objective Question

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45	45	H1N1 virus cause which of the following disease	4.0	1.00
		A1 Bird flu		
		A2 Swine flu		
		A3 Dengue		
		A4 AIDS		

Objective Question

Objec	Objective Question				
46	46	Cancer causing genes are called	4.0	1.00	
		A1 Operons			
		A2 Oncogenes			
		A3 : Lethal genes			
		A4 : Lac operon			
Objec	tive Question				
47	47	Which of the following triplet codon is a chain termination?	4.0	1.00	
		A1 UAG			
		A2 UGU :			
		A3 UUG			
		A4 GUU			

		Fauna range from 200 μ to 1mm size is called		
		Al Hicrofauna		
		A2 : Nanofauna		
		A3 : Mesofauna		
		A4 : Macrofauna		
Object 49	tive Question 49	Which of the following frequency regions are part of sun's radiation?	4.0	1.00
		when of the following nequency regions are part of sun's radiation:		
		A1 Visible frequency region		
		A2 : Infrared frequency region		
		A3 Ultraviolet frequency region		
		A4 All of these		
Object	tive Question			
Object 50	tive Question	Which one of the following helps to identify the objects on the earth surface?	4.0	1.00
Object 50	tive Question	Which one of the following helps to identify the objects on the earth surface? A1 : Atmospheric window	4.0	1.00
Object 50	tive Question	Which one of the following helps to identify the objects on the earth surface? A1 Atmospheric window A2 Spectral signature	4.0	1.00
Object 50	50	Which one of the following helps to identify the objects on the earth surface? A1 A2 Spectral signature A3 Radiometric resolution	4.0	1.00
Object 50	50	Which one of the following helps to identify the objects on the earth surface? A1 A1 Atmospheric window A2 Spectral signature A3 Radiometric resolution A4 Temporal resolution	4.0	1.00
Object 50 Object	50 tive Question	Which one of the following helps to identify the objects on the earth surface? A1 Atmospheric window A2 Spectral signature A3 Radiometric resolution A4 : Temporal resolution	4.0	1.00
Object 50 Object 51	tive Question 50 tive Question 51	Which one of the following helps to identify the objects on the earth surface? A1 A1 Atmospheric window A2 Spectral signature A3 Radiometric resolution A4 Temporal resolution	4.0	1.00
Object 50 Object 51	tive Question 50 tive Question 51 51	Which one of the following helps to identify the objects on the earth surface? A1 Atmospheric window A2 Spectral signature A3 Radiometric resolution A4 Temporal resolution The smallest unit in a raster data is A1 Pixel	4.0	1.00
Object 50 Object 51	tive Question 50 tive Question 51	Which one of the following helps to identify the objects on the earth surface? A1 Atmospheric window A2 Spectral signature A3 Radiometric resolution A4 Temporal resolution Intersection A1 Yesel A2 Band	4.0	1.00
Object 50 Object 51	tive Question 50 tive Question 51 51	Which one of the following helps to identify the objects on the earth surface? A1 Atmospheric window A2 Spectral signature A3 Radiometric resolution A4 Temporal resolution	4.0	1.00

)bjectiv 2 :	ve Question			
2	· ·			
	52	The range of normal human hearing is in the range of	4.0	1.00
		A1 10 Hz to 80 Hz		
		A2 20Hz to 20000 Hz		
		A3 50 Hz to 80 Hz		
		A4 15000 Hz and above		
bjectiv	ve Question			
3	53	The pollution which does not cause persistent harm to life supporting system is	4.0	1.00
		A1 Noise pollution		
		A2 Radiation pollution		
		A3 Organochlorine pollution		
		A4 Thermal pollution		
biectiv	ve Question			
4	54	The main atmospheric layer near the surface of earth is	4.0	1.00
		Al ionosphere		
		A2 mesophere		
		A3 troposphere		
		A4 : stratospere		
bjectiv	ve Question			
5	55	All are particulate pollutants except	4.0	1.00
		Al dust		
		A2 ozone		
		A3 soot		

		A4 : smoke		
Object	tive Question			
56	56	Chipko revolution is related to:	4.0	1.00
		A1 : Forest conservation		
		A2 : Soil conservation		
		A3 Water conservation		
		A4 : Animal conservation		
Object	tive Question			
57	57	Metalimnion is:	4.0	1.00
		A1 Lower part where water temperature is low		
		A2 : Upper part subject to temperature fluctuation		
		A3 : Middle transitional zone		
		A4 : Aphotic region of deep lake		
Object	tive Question			
58	58	The term biomagnifications refers to the:	4.0	1.00
		A1 Increase in population size		
		A2 : Growth of organisms due to food consumption		
		A3 Blowing up of environment issues by man		
		A4 Increase in the concentration of non-degradable pollutants as they pass through food chain		
Object	tive Question			
59	59	Figs belong to:	4.0	1.00
		A1 Critical link species, as they form connecting link between trees and herbs		
		A2 : Critical link species, as they establish essential link in the absorbance of nutrients from soil and organic residuces		
		A3 Keystone species, as they produce large quantity of fruits and their protection leads to conservation of animals		

		: dependent on them		
		A4 Keystone species, as they have high degree of animal dependent pollination		
Object	ive Question			
60	60	Excess of water released through leaf tip is called	4.0	1.00
		A1 : transpiration		
		A2 : osmosis		
		A3 respiration		
		A4 guttation		
Object	ive Question			
61	61	Knocking effect in the gasoline cannot be reached by one of the following additives:	4.0	1.00
		A1 (C ₂ H ₅) ₄ Pb		
		A2 BTX		
		A3 : Kerosene		
		A4 : n-Butane		
Obiect	ive Ouestion			
62	62	Given below are two statements. One labelled as Assertion (A) and the other labelled as Reason (R). Assertion (A): Metallic contaminants are toxic to the microorganism. Reason (R): Heavy metal tends to precipitate in the form of phosphatic compounds and decrease soil fertility. In the context of the two statements, which one of the following is correct?	4.0	1.00
		A1 Both (A) and (R) are correct and (R) is the correct explanation of (A):		
		A2 Both (A) and (R) are correct and (R) is not the correct explanation of (A):		
		A3 (A) is true, but (R) is false		
		A4 (A) is false, but (R) is true		
Object	ive Question			
63	63	A point source of sound produces a noise of 70 dB at a distance of 20 m from it. What will be the noise level at 80 m from it?	4.0	1.00

A1 35 dB

		: 58 dB		
		A3 64 dB		
		A4 52 dB		
Objec	ctive Question			
64	64	At initial time (t_0) number of E.coli per ml was 10. If generation time is 30 minutes, what would be number of cells per ml after a duration of 4 hours?	4.0	1.00
		A1 256		
		A2 2560		
		A3 240		
		A4 300		
Objec	ctive Question			
65	65	ISO 14040 is	4.0	1.00
		A1 Environmental Management - Life cycle assessment principle and framework		
		A2 Environmental Management – environmental assessment of sites and organization		
		A3 Guidelines for environmental audit – general principle		
		A4 Environmental Management – vocabulary		
Ohieo	tive Question			
66	66	Ecosystem diversity can be best studied using the	4.0	1.00
		A1 Topographical maps :		
		A2 Geoinformatics		
		A3 Geodesy		
		A4 : Geology		
o1 ·				

		As per the color coding of plastic bags for biomedical wastes, match the List-I with List II and choose the correct answer from the codes given below		
		List IList II(color code)(Option for disposal)(a)Yellow plastic bag(i) Disposal in secured land fills(b)Black plastic bag(ii) Incineration and deep burials(c)Blue/White plastic bag(iii) Autoclaving and chemical treatment(d)Red plastic bag(iv) Microwave treatments and destruction		
		A1 : (a)-(i), (b)-(ii), (c)-(iii), (d)-(iv)		
		A2 : (a)-(ii), (b)-(i), (c)-(iv), (d)-(iii)		
		A3 : (a)-(ii), (b)-(iii), (c)-(i), (d)-(iv)		
		A4 : (a)-(iv), (b)-(ii), (c)-(i), (d)-(iii)		
Object	ive Question			
68	68	Concept of intergenerational equity on natural resources refers to	4.0	1.00
		A1 Legal obligations of present generation to future generations		
		A2 Moral obligation of the present generation to future generation		
		A3 Equitable responsibility of pollution generating industries		
		A4 Prudent use of resources inherited from previous generation.		
Object	ive Question			
69	69	Which one of the following protozoan is related to water borne disease?	4.0	1.00
		A1 Spumella sp.		
		A2 Entamoeba histolytica		
		A3 Paramoecium :		
		A4 Plasmodium vivax		
Object	ive Question		4.0	1.00
10	10	which of the following has the lowest Ozone depletion potential?	т.0	1.00
		A1 HCFC – 22		
		A2 HCFC – 123		

A3 : Halon – 1211

A4 : CFC - 12

Object	ive Question			
71	71	Disaster management Act in India came into existence in the year	4.0	1.00
		A1 2003		
		A2 2005		
		A3 : 1998		
		A4 : 2006		
Object	ive Question			
72	72	The standard hydrogen electrode, the pressure of hydrogen and hydrogen ion concentration respectively are:	4.0	1.00

Objec	tive Question			
72	72	The standard hydrogen electrode, the pressure of hydrogen and hydrogen ion concentration respectively are: A1 1 atm : 10 m A2 10 atm : 1 m A3 1 atm : 1 m	4.0	1.00
		A4 : 1 atm : m/10		
Objec	tive Question		1	1
13	13	Consider the following statements: I. Entropy in a spontaneous reaction increases II. Free energy in a spontaneous reaction is in equilibrium IV. Free energy increases in a reverse reaction Which of these are correct: A1 I and II only	4.0	1.00
		A2 : II and III only		
		A3 I and III only		
		A4 I II and IV only		
Objec	tive Question			
74	74	Given below are two statements. One labelled as Assertion (A) and the other labelled as Reason (R).	4.0	1.00

	Assertion (A): Increased level of Arsenic in water is a health hazard. Reason (R): Arsenic has antagonistic behavior with other metals, its dietary requirement is in trace amount and shows speciation. In the context of the two statements, which one of the following is correct?		
	A1 Both (A) and (R) are correct		
	A2 Both (A) and (R) are correct and (R) is not the correct explanation of (A)		
	A3 (A) is true, but (R) is false		
	A4 (A) is false, but (R) is true		
75 75	When terrestrial plant communities progress with time from successional to climax stage: I. Standing crop biomass increases II. Net ecosystem productivity increases III. Gross productivity per unit of standing crop biomass decreases IV. Biomass supported per unit of energy flow decreases Which of these are correct:	4.0	1.00
	Al I and II only :		
	A2 I and III only :		
	A3 I and IV only :		
	A4 : :		
Objective Ouest	tion		
76 76	Given below are two statements. One labelled as Assertion (A) and the other labelled as Reason (R). Assertion (A): Hot spots are the region showing richness of endemic species. Reason (R): The distribution of endemic species are confined to a specific region In the context of the two statements, which one of the following is correct?	4.0	1.00
	A1 Both (A) and (R) are correct and (R) is correct explanation of (A).		
	A2 Both (A) and (R) are correct but (R) is not the correct explanation of (A):		
	A3 (A) is true, but (R) is false		
	A4 (A) is false, but (R) is true		
Objective Onest	tion		
77 77	Given below are two statements. One labelled as Assertion (A) and the other labelled as Reason (R). Assertion (A): Decomposition of hydrocarbons is favored in neutral soil. Reason (R): Neutral pH favors the greatest populations of micro-organisms. In the context of the two statements, which one of the following is correct?	4.0	1.00
	A1 Both (A) and (R) are correct and (R) is correct explanation of (A)		

		:		
		A2 Both (A) and (R) are correct but (R) is not the correct explanation of (A):		
		A3 (A) is true, but (R) is false		
		A4 : (A) is false, but (R) is true		
Object	ive Question			
78	78	Thiobacillus and Beggiatoa play an important role in the:	4.0	1.00
		A1 Water cycle on Earth		
		A2 Phosphorus cycle		
		A3 Sulfur cycle in the soil		
		A4 Breakdown of sewage		
Object	ive Question			
79	79	In a simple regression consisting of dependent variable Y, independent variable X and random error term \in , Y = α + β X+ \in , the expectation value $\leq \epsilon >$ is :	4.0	1.00
		A1 . 0		
		$\frac{A2}{2} \alpha/\beta$		
		Α3 β/α		
		A4 (β-α)		
Object	ive Ouestion			
80	80	The geometric mean of the data 2, 4, 27 is:	4.0	1.00
		A1 6		
		$\frac{A2}{2}$ $6\sqrt{6}$		
		A3 : 16.5		
		A4 _{√33}		

81	81	Bulking of sewage sludge is frequently associated with:	4.0	1.00
		A1 High C : N ratio		
		A2 : High C : P ratio		
		A3 High dissolved oxygen		
		A4 High C: K ratio		
Object	tive Question			
82	82	About half of the earth's photosynthesis is carried out by	4.0	1.00
		A1 Cyanobacteria		
		A2 Rainforest flora		
		A3 Protists		
		A4 : : Marine phytoplankton		
Object	tive Question			
83	83	Deep sea ferromanganese nodules are found on:	4.0	1.00
		A1 Oceanic plateau		
		A2 Oceanic ridges		
		A3 Coceanic islands		
		A4 Coceanic plains		
Object	tive Question			
84	84	For aerosol particles of size comparable to wavelength of either shortwave radiation or infra-red radiation, the following type of scattering takes place:	4.0	1.00
		A1 Rayleigh scattering		
		A2 Mie scattering		
		A3 Raman scattering		
		A4 Brillouin scattering		

		:		
Objec	tive Question			
85	85	Biogas production is the outcome of	4.0	1.00
		A1 Methanogenesis		
		A2 Pyrolysis		
		A3 : Methanogenesis and Gasification		
		A4 Gasification		
Objec	tive Question			
86	86	Ramsar Convention is associated with	4.0	1.00
		A1 Forest conservation		
		A2 : Soil conservation		
		A3 Wetland conservation		
		A4 Wildlife conservation		
Objec	tive Question			
87	87	The term aligatrophic refers to	4.0	1.00
		A1 Higher nutrients in water		
		A2 : High aquatic productivity		
		A3 : Low nutrients and low productivity		
		A4 :		
Ohin	tive Overti			
88	88	In symmetrical distribution pattern	4.0	1.00
		A1 Median, Mean and Mode coincide		
		A2 : : :		
		A3 Mean and Mode coincide		

		A4 : Mode and Median coincide		
Obje	ctive Question			
89	89	Black foot disease is caused by	4.0	1.00
		A1 excess of fluoride in water		
		A2 : deficiency of iodine in water		
		A3 : excess of arsenic in water		
		A4 : excess of iodine in water		
Obie	ctive Question			
90	90	The size distribution of particles in soil and sediments generally follow	4.0	1.00
		A1 binomial distribution		
		A2 : normal distribution		
		A3 linear distribution		
		A4 log-normal distribution		

Objective Question

Objec	tive Question			
91	91	Garnet is a metamorphic product of	4.0	1.00
		Al Feldspar :		
		A2 ; Quartzite		
		A3 Mica		
		A4 Serpentine		
Objec	tive Question			
2	92	The aggregation of all eco systems on the earth is referred to as	4.0	1.00
		A1 Atmosphere		
		A2 Ecosphere		

A3 Stratosphere :

A4 : Ionosphere

Objec	tive Question	Question		
93	93	Geostationary satellites orbit above the earth at about	4.0	1.00
		A1 10 km from the earth surface		
		A2 500 km from the earth surface		
		A3 1500 km above the earth surface		
		A4 5 km from the earth surface		

Objective Question

94	94	One of the following in biogeochemical cycle has <i>not</i> involved biological fixation:	4.0	1.00
		A1 Oxygen		
		A2 : Carbon		
		A3 Nitrogen		
		A4 Phosphorus :		
Object	tive Question			
95	95	Which of the following is the concentration of CO ₂ in the atmosphere (water vapour free)?	4.0	1.00
		A1 0.32%		
		A2 0.032%		

A3 0.38%

Objective Question

96

96

A4 : 0.038%

A2 180-250° C

Diesel oil is a fraction obtained between A1 : 40-120° C

4.0 1.00

		A3 : 250-320° C		
		A4 : 280-360° C		
Object	tive Question			
97	97	If the size of the sample is very small, then suitable sampling method for better result is obtained by	4.0	1.00
		A1 Random sampling		
		A2 Stratified sampling		
		A3 Census sampling		
		A4 Purposive sampling		
Object	tive Question			
98	98	Across the boundaries of a closed thermodynamical system	4.0	1.00
		A1 matter flows but the energy doesn't		
		A2 energy flows but the matter doesn't		
		A3 both energy and matter flow :		
		A4 both energy and matter do not flow :		
Object	tive Question			
99	99	The largest soil group in India is of	4.0	1.00
		Al Red soil		
		A2 Black soil		
		A3 Sandy soil		
		A4 : Mountain soil		
Object	tive Question			
100	100		4.0	1.00

List I (Analytical techniques) (a) XRF (b)Nephelometry (c)IR spectroscopy	List II (Measured items) (i) Functional groups (ii) Elements (iii) Turbidity (iii) PAH	
A1 (a)-(i), (b)-(iii), (c)-(iv), (d)-(ii)		
A2 (a)-(ii), (b)-(i), (c)-(iv), (d)-(iii)		
A3 (a)-(ii), (b)-(iii), (c)-(i), (d)-(iv)		
A4 (a)-(iv), (b)-(ii), (c)-(i), (d)-(iii)		