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

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

		A2 : Tropical waters A3 : Antartic waters A4 : Arctic waters		
Objective Question				
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 A1 : I and II only A2 : I, III and IV only A3 : II, III and IV only A4 : I, II, III and IV	4.0	1.00
Objective Question				
6	6	Water entrapped at the time of formation of the sedimentary rocks is called: A1 : Meteoric water A2 : Ground water A3 : Connate water A4 : Juvenile water	4.0	1.00
Objective Question				
7	7	BOD of the effluent discharged on land for irrigation should not exceed A1 : 30 mg/l A2 : 100 mg/l A3 : 300 mg/l A4 : 60 mg/l	4.0	1.00

Objective Question				
8	8	An ocean wave has a height of 3 m and has time period of 10 sec. The power available for extraction from this wave in the units of kW per meter of the wavefront is approximately: A1 : 30 A2 : 60 A3 : 90 A4 : 120	4.0	1.00
Objective 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: A1 : -560 nm A2 : -720 nm A3 : -480 nm A4 : -1100 nm	4.0	1.00
Objective Question				
10	10	Which one of the following is not a biofertilizer? A1 : Aquatic ferns A2 : Blue-green algae A3 : Phosphate-Solubilizing micro-organisms A4 : Vermicompost	4.0	1.00
Objective Question				
11	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 A1 : I, III and IV only A2 : II and III only	4.0	1.00

		A3: I, II and IV only A4: I, II, III and IV		
Objective Question				
12	12	When DDT enters the human body, it is: 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	4.0	1.00
Objective 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: 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	4.0	1.00
Objective Question				
14	14	In an ecological succession there is a progressive change in biological community over time and space 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	4.0	1.00
Objective Question				
15	15	In ADS – PAGE: A1 Polymeric proteins are not only converted into monomers, but monomers are also denatured by SDS	4.0	1.00

		: 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		
Objective Question				
16	16	Elemental carbon influences the regional climate because: 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	4.0	1.00
Objective Question				
17	17	To determine the cation-exchange capacity, it is necessary to calculate the total positive charge associated with ions like: A1 : Ca^{2+}, Mg^{2+}, K^{+}, Na^{+} A2 : Ca^{2+}, Mn^{2+}, Fe^{3+}, Cr^{3+} A3 : Mg^{2+}, Fe^{3+}, Ni^{2+}, Cd^{2+} A4 : K^{+}, BO^{2+}, Pb^{2+}, Hg^{2+}	4.0	1.00
Objective Question				
18	18	Match the List I and List II. Identify the correct answer from the codes given below the lists List I (Organism) (a) Albugo and India mustard (b) Penicillium and Staphyllococcus (c) Lichens (d) Barnacles and whales List II (Interaction) (i) Symbiosis (ii) Ammensalism (iii) Commensalism (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)	4.0	1.00

		A4 : (a)-(iv), (b)-(ii), (c)-(i), (d)-(iii)		
Objective Question				
19	19	The set of processes by which soil and rock are loosened and move downhill are called: A1 : Erosion A2 : Abrasion A3 : Saltation A4 : Weathering	4.0	1.00
Objective Question				
20	20	pH of 1 mM HCl is : A1 : 1 A2 : 2 A3 : 3 A4 : 11	4.0	1.00
Objective Question				
21	21	Who proposed that succession is not orderly and directional but is heterogeneous? A1 : Clements A2 : Egler A3 : Tansley A4 : Reiter	4.0	1.00
Objective 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? A1 : Cyclnes A2 : Baghouse	4.0	1.00

A3 : Electrostatic precipitator

A4 : Venturi scrubber

Objective Question

23 | 23 | EIA of Port and Harbour projects involve impact assessment on:
I. Biological environment
II. Air environment
III. Soil environment
IV. Social environment
Choose the correct answer:

A1 : I only

A2 : II only

A3 : III only

A4 : I, II and IV only | 4.0 | 1.00

Objective Question

24 | 24 | Match the List I and List II. Identify the correct answer from the codes given below the lists

List I (Tests)	List II (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	(iii) Compare the variance of two-independent samples
d) F-test	(iv) Compare sample variance to a theoretical population variance

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) | 4.0 | 1.00

Objective 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

A1 : 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		
Objective Question				
26	26	Which radiative element is considered as an indoor pollutant? A1 : Oxygen – 18 A2 : Nitrogen – 15 A3 : Carbon – 13 A4 : Radon	4.0	1.00
Objective Question				
27	27	The rate of biogenetic nutrients between the abiotic and biotic components of an ecosystem is often referred to as: A1 : Turn over rate A2 : Production rate A3 : Standing state A4 : Cycling rate	4.0	1.00
Objective Question				
28	28	Which of the following is the *in-situ* biodiversity conservation site? A1 : Botanical garden A2 : Arborium A3 : Biosphere reserve A4 : Orchidarium	4.0	1.00
Objective Question				
29	29	Which is the cleanest fuel for power generation?	4.0	1.00

		A1 : Coal A2 : Uranium A3 : Hydrogen A4 : Water		
Objective Question				
30	30	Blue baby syndrome is caused due to intake of water high in A1 : Ammonia A2 : Nitrates A3 : Sulphates A4 : Sulphides	4.0	1.00
Objective Question				
31	31	Which of the following ranges of scale lengths represents meso-scale motions in atmosphere? A1 : 30 km – 400 km A2 : 500 m – 10 km A3 : 1 km – 2 km A4 : 100 m – 1 km	4.0	1.00
Objective Question				
32	32	Beer-Lambert’s law defines A1 : The degree of absorption of monochromatic light by a homogeneous medium A2 : Atomic absorption spectrophotometry A3 : Atomic emission spectrophotometry A4 : Gas chromatography	4.0	1.00
Objective 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) 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	4.0	1.00
Objective Question				
34	34	Which one of the following enzymes work under strict anaerobic conditions to fix atmospheric nitrogen? A1 : Nitrate reductase A2 : Nitrite reductase A3 : Transaminase A4 : Nitrogenase	4.0	1.00
Objective 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: A1 : I only A2 : I and II only A3 : I and III only A4 : II and IV only	4.0	1.00
Objective Question				
36	36	Indian Remote Sensing satellite (IRS 1C) contains A1 : One sensor A2 : Two sensors	4.0	1.00

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

		A2 : High Nutrients and low productivity A3 : Low Nutrients and high productivity A4 : Low Nutrients and low productivity		
Objective Question				
41	41	What is the term for a collection of similar ecosystems? A1 : ecosystem A2 : ecotone A3 : biome A4 : community	4.0	1.00
Objective Question				
42	42	"Mammals of cold regions show tendency to have shorter extremities than in warmer regions" this statement is called as A1 : Gloger rule A2 : Allen's rule A3 : Jordan rule A4 : Renche's rule	4.0	1.00
Objective Question				
43	43	Which of the following statements best describes the work done by decomposers? 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	4.0	1.00
Objective Question				
44	44	In India, Crocodile breeding project started for the first time in A1 Tamil Nadu	4.0	1.00

		: A2 : West Bengal A3 : Odisha A4 : Goa		
Objective Question				
45	45	H1N1 virus cause which of the following disease A1 : Bird flu A2 : Swine flu A3 : Dengue A4 : AIDS	4.0	1.00
Objective Question				
46	46	Cancer causing genes are called A1 : Operons A2 : Oncogenes A3 : Lethal genes A4 : Lac operon	4.0	1.00
Objective Question				
47	47	Which of the following triplet codon is a chain termination? A1 : UAG A2 : UGU A3 : UUG A4 : GUU	4.0	1.00
Objective Question				
48	48		4.0	1.00

		Fauna range from 200µ to 1mm size is called A1 : Microfauna A2 : Nanofauna A3 : Mesofauna A4 : Macrofauna		
Objective Question				
49	49	Which of the following frequency regions are part of sun's radiation? A1 : Visible frequency region A2 : Infrared frequency region A3 : Ultraviolet frequency region A4 : All of these	4.0	1.00
Objective Question				
50	50	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
Objective Question				
51	51	The smallest unit in a raster data is A1 : Pixel A2 : Band A3 : Node A4 : Segment	4.0	1.00

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

		A4 : smoke		
Objective Question				
56	56	Chipko revolution is related to: A1 : Forest conservation A2 : Soil conservation A3 : Water conservation A4 : Animal conservation	4.0	1.00
Objective Question				
57	57	Metalimnion is: 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	4.0	1.00
Objective Question				
58	58	The term biomagnifications refers to the: 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	4.0	1.00
Objective Question				
59	59	Figs belong to: 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	4.0	1.00

		: dependent on them A4 : Keystone species, as they have high degree of animal dependent pollination		
Objective Question				
60	60	Excess of water released through leaf tip is called A1 : transpiration A2 : osmosis A3 : respiration A4 : guttation	4.0	1.00
Objective Question				
61	61	Knocking effect in the gasoline cannot be reached by one of the following additives: A1 : $(C_2H_5)_4Pb$ A2 : BTX A3 : Kerosene A4 : n-Butane	4.0	1.00
Objective Question				
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? 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	4.0	1.00
Objective 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? A1 : 35 dB	4.0	1.00

		A2 : 58 dB A3 : 64 dB A4 : 52 dB		
Objective 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? A1 : 256 A2 : 2560 A3 : 240 A4 : 300	4.0	1.00
Objective Question				
65	65	ISO 14040 is 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	4.0	1.00
Objective Question				
66	66	Ecosystem diversity can be best studied using the A1 : Topographical maps A2 : Geoinformatics A3 : Geodesy A4 : Geology	4.0	1.00
Objective Question				
67	67		4.0	1.00

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 I (color code)	List II (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)

Objective Question

68	68	Concept of intergenerational equity on natural resources refers to 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.	4.0	1.00

Objective Question

69	69	Which one of the following protozoan is related to water borne disease? A1 : *Spumella sp.* A2 : *Entamoeba histolytica* A3 : *Paramoecium* A4 : *Plasmodium vivax*	4.0	1.00

Objective Question

70	70	Which of the following has the lowest Ozone depletion potential? A1 : HCFC – 22 A2 : HCFC – 123	4.0	1.00

		A3 : Halon – 1211 A4 : CFC – 12		
Objective Question				
71	71	Disaster management Act in India came into existence in the year A1 : 2003 A2 : 2005 A3 : 1998 A4 : 2006	4.0	1.00
Objective 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 A4 : 1 atm : m/10	4.0	1.00
Objective Question				
73	73	Consider the following statements: I. Entropy in a spontaneous reaction increases II. Free energy in a spontaneous reaction increases III. Free energy remains constant when reaction is in equilibrium IV. Free energy increases in a reverse reaction Which of these are correct: A1 : I and II only A2 : II and III only A3 : I and III only A4 : I II and IV only	4.0	1.00
Objective 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		
Objective Question				
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: A1 : I and II only A2 : I and III only A3 : I and IV only A4 : I II and IV only	4.0	1.00
Objective Question				
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? 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	4.0	1.00
Objective Question				
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? A1 Both (A) and (R) are correct and (R) is correct explanation of (A)	4.0	1.00

		: 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 Question				
78	78	Thiobacillus and Beggiatoa play an important role in the: A1 : Water cycle on Earth A2 : Phosphorus cycle A3 : Sulfur cycle in the soil A4 : Breakdown of sewage	4.0	1.00
Objective Question				
79	79	In a simple regression consisting of dependent variable Y, independent variable X and random error term ϵ, $Y = \alpha+\beta X+\epsilon$, the expectation value $<\epsilon>$ is : A1 : 0 A2 : α/β A3 : β/α A4 : $(\beta-\alpha)$	4.0	1.00
Objective Question				
80	80	The geometric mean of the data 2, 4, 27 is: A1 : 6 A2 : $6\sqrt{6}$ A3 : 16.5 A4 : $\sqrt{33}$	4.0	1.00
Objective Question				

81	81	Bulking of sewage sludge is frequently associated with: A1 : High C : N ratio A2 : High C : P ratio A3 : High dissolved oxygen A4 : High C: K ratio	4.0	1.00
Objective Question				
82	82	About half of the earth's photosynthesis is carried out by A1 : Cyanobacteria A2 : Rainforest flora A3 : Protists A4 : Marine phytoplankton	4.0	1.00
Objective Question				
83	83	Deep sea ferromanganese nodules are found on: A1 : Oceanic plateau A2 : Oceanic ridges A3 : Oceanic islands A4 : Oceanic plains	4.0	1.00
Objective 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: A1 : Rayleigh scattering A2 : Mie scattering A3 : Raman scattering A4 Brillouin scattering	4.0	1.00

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

		A4 : Mode and Median coincide		
Objective Question				
89	89	Black foot disease is caused by A1 : excess of fluoride in water A2 : deficiency of iodine in water A3 : excess of arsenic in water A4 : excess of iodine in water	4.0	1.00
Objective Question				
90	90	The size distribution of particles in soil and sediments generally follow A1 : binomial distribution A2 : normal distribution A3 : linear distribution A4 : log-normal distribution	4.0	1.00
Objective Question				
91	91	Garnet is a metamorphic product of A1 : Feldspar A2 : Quartzite A3 : Mica A4 : Serpentine	4.0	1.00
Objective Question				
92	92	The aggregation of all eco systems on the earth is referred to as A1 : Atmosphere A2 : Ecosphere	4.0	1.00

		A3 : Stratosphere A4 : Ionosphere		
Objective Question				
93	93	Geostationary satellites orbit above the earth at about 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	4.0	1.00
Objective Question				
94	94	One of the following in biogeochemical cycle has *not* involved biological fixation: A1 : Oxygen A2 : Carbon A3 : Nitrogen A4 : Phosphorus	4.0	1.00
Objective Question				
95	95	Which of the following is the concentration of CO_2 in the atmosphere (water vapour free)? A1 : 0.32% A2 : 0.032% A3 : 0.38% A4 : 0.038%	4.0	1.00
Objective Question				
96	96	Diesel oil is a fraction obtained between A1 : 40-120^{o} C A2 : 180-250^{o} C	4.0	1.00

		: A3 : 250-320^{o} C A4 : 280-360^{o} C		
Objective Question				
97	97	If the size of the sample is very small, then suitable sampling method for better result is obtained by A1 : Random sampling A2 : Stratified sampling A3 : Census sampling A4 : Purposive sampling	4.0	1.00
Objective Question				
98	98	Across the boundaries of a closed thermodynamical system 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	4.0	1.00
Objective Question				
99	99	The largest soil group in India is of A1 : Red soil A2 : Black soil A3 : Sandy soil A4 : Mountain soil	4.0	1.00
Objective Question				
100	100		4.0	1.00

Match the List-I with List II and choose the correct answer from the codes given below

List I (Analytical techniques)	List II (Measured items)
(a) XRF	(i) Functional groups
(b)Nephelometry	(ii) Elements
(c)IR spectroscopy	(iii) Turbidity
(d)Gas chromatography	(iv) 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)