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BRAINWARE UNIVERSITY

Term End Examination 2022

Programme – BBA-2022/BBA(DM)-2022/BBA(HM)-2022/B.Com.(BF)-Hons]-2022/B.Sc. (AM)-Hons-2022/B.Sc.(MSJ)-Hons-2022/B.Sc.(PSY)-Hons-2022

Course Name – Environmental Studies

Course Code - ENV101

(Semester I)

Full Marks : 75

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 25=25

- Choose the correct alternative from the following :
- (i) State in which of the following ecosystem, the food web involves more species and more trophic levels?
 - a) Grassland

b) Ocean

c) Desert

- d) Glacier
- (II) The flow of energy in a food chain is
 - a) Unidirectional

b) Bidirectional

c) Cyclic

- d) Multi-directional
- (iii) The coldest region of atmosphere is
 - a) Mesosphere

b) Troposhere

c) Stratosphere

- d) Ionosphere
- (iv) Ganga Action Plan was initiated by the prime minister
 - a) Indira Gandhi

b) Narendra Modi

c) Rahul Gandhi

- d) Rajiv Gandhi
- (v) Identify the functions of Forest
 - a) Accessory function

b) Protective function

c) Productive function

- d) All the above
- (vi) Eutrophication in lake is due to the presence of
 - a) Nitrogen and Phosphorus

- b) BOD and COD
- c) Chromium and Mercury
- DO and bacteria
- (vii) State which ecological pyramid is always upright?
 - a) Pyramid of Number

b) Pyramid of Biomass

c) Pyramid of Energy

- d) All the above
- (viii) One horned rhino is found in .

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Brainware University	t mark
Barasat, Kolkata -700125	b) Kaziranga national park
La-ma national park	b) Kaziranga national park d) Sundarban national park
(ix) Ozone hole in Antarctica is due to	b) CFC
a) Methane	d) Nitrogen
1 503	
(x) Pyramid of energy is always	b) Inverted d) None of the above
a) Upright	d) Notice of
c) Horizontal (xi) The second trophic level in a lake is	b) Phytoplanktons
n that	d) Fungi
c) Zooplanktons	b) Temperature decreases with increase in
rate refers to	b) Temperature decreases with
a) Population increases in area with increase of	elevation d) Both temperature decreases and increases
	d) Both temperature design
c) Temperature increases with increase in	with increase
elevation (xiii) Which of the following regions have maximum	biodiversity
(xiii) Which of the following regions have	b) Taiga
a) Temperate rainforest	d) Mangroves
c) Tropical rain forest	and physical factors
(xiv) 1. Ecosystems consists of	b) Living organisms and physical factors
a) Only living organisms	d) Only physical factors
c) Only insects	
(xv) Identify the temperature range of troposphere	b) 15 to -56 °C
a) -2 to -92 °C	d) -92 to 1200 °C
c) -56 to -2 A°C (xvi) The maximum quantity of fresh water occurs i	b) Groundwater
a) River	d) Sea-water
c) Polar ice caps and Glaciers (xvii) Locate the layer present immediately above the	ne earth's surface
(xvii) Locate the layer present immediately above so	b) Stratosphere
a) Troposphere	d) Thermosphere
c) Mesosphere	n occevetem?
c) Mesosphere (xviii) Which is the basic component that flows in a	II ecosystem
	b) Mass d) None of the above
a) Energy	d) None of the above
c) Food chain (xix) Interpret Which layer experiences positive lay	ose rate?
(xix) Interpret Willer dyo.	b) Troposphere and Thermosphere
a) Troposphere and Stratosphere	d) Troposphere and Mesosphere
	es place?
c) Stratosphere and Mesosphere (xx) Choose in which layer ionization of gases take	b) Stratosphere
a) Troposphere	d) Thermosphere
1 a d a samboro	a) mermosphere
(xxi) Which water is available for plant uptake	
(XXI) Which water is available	b) Capillary water
a) Gravitational water	d) Hygroscopic water
c) Combined water (xxii) Hygroscopic water is water that remains after	drying or
(AAII) Trybrossep	D) 00p
a) Gravitational water	d) Distilled water
c) Combined water	
(xxiii) Which water is not available for plant uptake	
a) Hygroscopic and Combined water	III LIABIOSCODIC ALLA CAPITALIA
a) Hygroscopic and Hygroscopic water	d) Gravitational and Combined water
c) Gravitational and Hygroscopic water	
(xxiv) WAS stands for	
Do.	no 2 of 5

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c) W	aste Ad aste af maxim	fecte	d slurr	У
	of the			

b) Waste Activated system

d) Waste activation stock

e yield is obtained when the population is

acity

g capacity

b) Double of the carrying capacity

d) Three-fourth of the carrying capacity

Group-B

(Multiple Choice Type Question)

2 x 10=20

Choose the correct alternative from the following:

- (i) What radiations are absorbed by Carbon dioxide and Ozone
 - a) Ultrared and Infraviolet radiations

b) Ultraviolet and Infrared radiations

c) Infrared and Ultraviolet radiations

d) None of these

- (ii) The type of pollution and phenomenon of marble cancer is due to
 - a) Air pollution and CFCs

b) Water pollution and Fog

c) Air pollution and Base Rain

- d) Air pollution and Acid Rain
- (iii) Which of the following gas affects human health by reducing the blood's ability to carry oxygen to different parts of the body?
 - a) Carbon dioxide

b) Nitrogen dioxide

c) Carbon monoxide

- d) Nitrous dioxide
- (iv) Bhopal gas tragedy was caused by the leakage of
 - a) Methyl isocyanate in 1985
- b) 2-4 dichlorophenoxyacetic acid in 1984
- c) Methyl isocyanate in 1984
- d) Hydrogen cyanide in 1984
- (v) Analyze the toxins that biologically magnify or accumulate in organisms are:
 - a) Heavy metals and Carbon dioxide
 - c) Fat and CFC's
- b) Mercury and DDT ·
- d) None of these
- (vi) Green muffler and Greenhouse effect are related to
 - a) Air pollution and involves in photosynthesis
- Soil pollution and emits light
- c) Water pollution and traps UV radiation
- d) Noise pollution and traps infrared radiation
- (vii) A 5 % solution of a sewage sample is incubated for 5 days at 20°C. Find the BOD of the swage if the depletion of oxygen was found to be 5 mg/l.
 - a) 100 %

b) 25 mg/l

c) 100 ppm

- d) 100 g/l
- (viii) Green muffler and Greenhouse effect are related to
 - a) Air pollution and involves in photosynthesis
- c) Water pollution and traps UV radiation
- Soil pollution and emits light
- d) Noise pollution and traps infrared radiation (ix) The name of the diseases Minamata, Itai-Itai and Blue Baby are caused by
- a) Cadmium-Mercury-Nitrate
- b) Mercury-Nitrate-Cadmium
- c) Nitrate-Cadmium-Mercury
- d) Mercury-Cadmium-Nitrate
- (x) Justify the 'Ozone hole' means and its result.
 - a) Increase in the concentration of ozone and Acid rain
 - c) Same concentration of ozone and Greenhouse effect
- b) Decrease in the concentration of ozone and Global warming
- d) Hole in the stratosphere and UV radiations reach the earth

Group-C

(Multiple Choice Type Question)

3 x 10=30

Brainware Un Barasat, Kolkan	3.**	Choose the correct alternative from the followin	g:			
7. ₹	(i)	E coli used as an indicator organism to determi	ine p	ollution of water with		
ain Bes		a)	b	Heavy metals <p< th=""></p<>		
6 6 6		Industrial effluents		style="margin:0cm;margin-bottom:.0001pt' <o:p></o:p>		
	1	c) Pollen of aquatic plants	d)	Faecal matter		
	(ii)	Manmade resources are alternative to natural resources for a variety of reasons. Which of these would not be one of those?				
		a) They increase variety and choice		They are cheaper to produce than natural resources		
		c) They are made from renewable resources	. d)	They are better suited for the purpose for which they will be used		
	(iii)	Which is the correct option the Amazon rain forest?				
		I. In this rain forest there might be at leas be discovered and named.	o million insects species waiting to			
		II. This forest is known as lungs of the plan	a very about the season of the season of			
		III. In this forest digging of mine is perform	by dynamine.			
		IV. This forest are destroyed for the cultivation of soyabeans.				
		V. This forest contains world famous Biodi	ous Biodiversity			
		a) i, ii, iv, v		i, ii, iii, iv		
	livi	c) ii, iii, iv, v	iii, v, iv			
	(10)	Which of the following statements regardi lowest degree of certainty?	ing t	ne greenhouse effect has the		
		a) Addition of greenhouse gases to the	b)	Class		
		atmosphere results in increased heat energy in the atmosphere		Global warming will result in an increase in the number of tropical storms		
		c) Global warming will result in rising sea levels	d)	The concentrations of greenhouse gases in the atmosphere are increasing due to human activities.		
	(v)	A fabric filter is to be constructed using ba	ags t	that are 0.1 m in diameter and 5.0		
		m long. The bag house is to receive 5 m ³ /s of air. Filtering velocity is 2.0 m/min. Determine the minimum number of bags required for continuous removal of particulate matter.				
		a) 96		106		
	(vii)	c) 78	d)	88		
	(۷1)	Identify the correct sequence in decreasing or in the following locations:	of percentage of total world's water			
		(A) Atmosphere				
		(B) Rivers and Streams				
		(C) Ground water				
		(D) Lakes (Fresh water)				
		(E) Ice Caps and Glaciers				
		Choose the correct answer from the options give	n be	low		

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a)	(E),	(C),	(B),	(D),	(A)

b) (E), (B), (C), (D), (A)

c) (E), (D), (C), (B), (A)

d) (E), (C), (D), (A), (B)

(vii) Select the correct statement about biodiversity

- a) The desert areas of Rajasthan and Gujarat have a very high level of desert animal species as well as numerous rare animals
- c) Western Ghats have a very high degree of species richness and endemism
- Large scale planting of BT cotton has no adverse effect on biodiversity
- d) Conservation of biodiversity in just a fad pursued by the developed countries

(viii) Peroxy-acetyl nitrate (PAN) is formed by the reaction of two primary pollutant, namely nitrogen oxide and _____ released from motor in the presence of sunlight.

a) hydro-neutron

b) hydro-carbon

c) water-carbons

- d) SO2
- (ix) Given below are two statements: One is levelled as Assertion (A) and the other is levelled as Reason (R): Assertion (A): The problem of organic in rivers is usually worse in hot summer months. Reason (R): Higher water temperatures exacerbate oxygen depletion. In the light of the above statements, choose the most appropriate answer from the options below:
 - a) Both (A) and (R) are true and (R) is the correct explanation of (A).
 - c) (A) is correct but (R) is not correct
- Both (A) and (R) are true and (R) is not the correct explanation of (A)
- d) (A) is not correct but (R) is correct.
- (x) Which of the following statements regarding the greenhouse effect has the lowest degree of certainty?
 - Addition of greenhouse gases to the atmosphere results in increased heat energy in the atmosphere
 - Global warming will result in rising sea levels
- b) Global warming will result in an increase in the number of tropical storms
- d) The concentrations of greenhouse gases in the atmosphere are increasing due to human activities.