

Seat No: \_\_\_\_\_

Enrollment No: \_\_\_\_\_

**PARUL UNIVERSITY**  
**COLLEGE OF AGRICULTURE**

**B.Sc. (Hons.) Agriculture Examination 2023-24**

Semester: III

Date: 10-12-2023

Subject Code: 20110202

Time: 10.30 am to 1.00 pm

Subject Name: Environmental Studies and Disaster Management

Total Marks: 50

**Instructions**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

**Q.****1 Do as Directed.**

	CO	PO	Bloom's Taxonomy
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**A. Fill in the blanks. (Each of 0.5 mark)****(05)**

- |   |   |   |    |
|---|---|---|----|
| 1. Botanical Name of Amla Tree is _____.                                    | 1 | 1 | L1 |
| 2. The term "Environment" is derived from _____ word.                       | 1 | 1 | L1 |
| 3. Environment Protection Act was enacted in _____.                         | 1 | 1 | L1 |
| 4. Lotic ecosystem is _____ water ecosystem.                                | 1 | 1 | L1 |
| 5. Only _____ % of water is available as fresh water on earth.              | 2 | 1 | L1 |
| 6. _____ is the outer mantle of the solid earth.                            | 2 | 1 | L1 |
| 7. GHG stands for _____.  | 2 | 1 | L1 |
| 8. The German biologist _____ coined the word "Ecology" in 1869.            | 2 | 1 | L1 |
| 9. The level of energy flow in each link of the food chain is called _____. | 2 | 1 | L1 |
| 10. The pyramid of energy is always _____.                                  | 2 | 1 | L1 |

**B. Multiple choice type questions. (Each of 0.5 mark)****(10)**

- |   |   |   |    |
|---|---|---|----|
| 1. The ozone layer is present at a distance of _____ from the earth.  | 2 | 1 | L1 |
| a) 14-18 km                      b) 50 km<br>c) 18-50 km                      d) 50-80 km                               |   |   |    |
| 2. _____ are denitrifying bacteria.   | 2 | 1 | L1 |
| a) <i>Nitrosomonas</i> b) <i>Pseudomonas fluorescens</i><br>c) <i>Nitrobacter</i> d) None                               |   |   |    |
| 3. The Environment Protection Act was passed in _____.  | 3 | 1 | L1 |
| a) 1986                                      b) 1972<br>b) 1990                                      d) 1980            |   |   |    |
| 4. What is deforestation?   | 3 | 1 | L1 |
| a) Product of forest                      b) Destruction of forest<br>b) Forest protection                      d) None |   |   |    |
| 5. The dam built on Narmada River in Gujarat is _____.  | 2 | 1 | L1 |
| a) Heerakund                              b) Sardar Sarovar<br>b) Bhakranagal                      d) Nagarjunsagar Dam |   |   |    |
| 6. The layer of earth surrounds the air is called _____.  | 2 | 1 | L1 |
| a) Atmosphere                              b) Biosphere<br>c) Hydrosphere                              d) Lithosphere   |   |   |    |
| 7. The Gir National Park providing habitat for _____.   | 2 | 1 | L1 |
| a) Bengal Tiger                              b) Rhinoceros<br>c) Asiatic Lion                              d) Elephant  |   |   |    |
| 8. The area to which a species is biologically adapted to live is known as _____.                                       | 2 | 1 | L1 |
| a) Niche                                      b) Habitat<br>c) Succession                              d) Community     |   |   |    |
| 9. _____ is the coldest layer of atmosphere.  | 2 | 1 | L1 |
| a) Troposphere                              b) Ionosphere   |   |   |    |

c) Mesosphere	d) Thermosphere			
10. The presence of which is necessary for photosynthesis.		1	1	L1
a) Chloroform	b) Chlorophyll			
c) Phosphorus	d) Polymer			
11. The relationship between nitrogen fixing bacteria and leguminous plants is an example of		2	1	L1
a) Parasitism	b) Predation			
c) Mutualism	d) Commensalism			
12. Following is an example of lotic system.		3	1	L1
a) Pond	b) River			
c) Lake	d) Reservoir			
13. The term 'Ecology' was coined by		2	1	L1
a) A.G. Tansley	b) Earnst Haeckel			
c) Aristotle	d) Linnaeus			
14. The annual rainfall of India is _____.		8	1	L1
a) 1194 mm	b) 900 mm			
c) 1000 mm	d) 1500 mm			
15. Following is an example of an abiotic component.		7	1	L1
a) Plants	b) Soil			
c) Animals	d) Bacteria			
16. What is lentic habitat?		3	1	L1
a) Running water habitat	b) Standing or still water habitat			
c) Marine habitat	d) None			
17. The total number of oceans present in the world _____.		1	1	L1
a) 4	b) 6			
c) 5	d) 7			
18. Acid rain contains		3	5	L1
a) Sulphur dioxide	b) Hydrochloric acid			
c) Oxalic acid	d) Acetic acid			
19. The gas, which is mainly responsible for ozone layer depletion, is		3	1	L1
a) CFC	c) NO <sub>2</sub>			
c) CO <sub>2</sub>	d) SO <sub>2</sub>			
20. The source of methane gas to the environment is.		3	1	L1
a) Paddy field and biogas	b) Automobiles			
c) Deforestation	d) Vehicles			

**Q.  
2 Do as Directed.**

<b>A. Define the following. (Any five out of seven)</b>	<b>(05)</b>			
1. Environmental Science		1	1	L1, L2
2. Ecosystem		2	1	L1, L2
3. Biodiversity		7	1	L1, L2
4. Ecology		2	1	L1, L2
5. Lithosphere		1	1	L1, L2
6. Eutrophication		5	1	L1, L2
7. Deforestation		7	1	L1, L2
<b>B. Answer the following. (Any five out of seven)</b>	<b>(05)</b>			
1. Natural resources		1	1	L2
2. Biodegradable		1	5	L2
3. Forest		2	1	L2
4. Food chain		2	1	L2
5. Food web		2	1	L2
6. Ecological pyramid		2	1	L2
7. What is greenhouse effect?		3	5	L2

**Q.  
3 Write short notes. (Any five out of six)**

1. Diagram of food chain		2	1	L5
2. Carbon cycle	<b>(15)</b>	3	1	L2
3. Soil pollution		3	1	L2, L1
4. Food chain		2	1	L2

5. Wetland ecosystem	7	1	L2,L5
6. Ecological pyramid	2	1	L3

**Q. 4 Long Questions / Example (Attempt any three out of four)**

1. Explain the effect of global warming.	7	2	L4
2. What is pollution? Explain.	3	2	L1,L2,L5
3. What is biodiversity? Explain.	7	1	L1,L2,L5
4. Explain aquatic ecosystem.	2	1	L1,L2,L5