

**PARUL UNIVERSITY**  
**FACULTY OF AGRICULTURE**  
**B.Tech. (Dairy Technology) 2019 - 20 Examination**

**Semester: 2**  
**Subject Code: 20104155**  
**Subject Name: Environmental Studies**

**Date: 16/12/2019**  
**Time: 10.30 am to 12.30 pm**  
**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**

**A) Fill in the blanks (Each of 0.5 Mark) (05)**

- i) The pollutant responsible for ozone layer depletion is \_\_\_\_\_.
- ii) The main source of energy is \_\_\_\_\_.
- iii) The group of organisms that make their own food are known as \_\_\_\_\_.
- iv) The layer of atmosphere containing ozone gas is \_\_\_\_\_.
- v) Evaporation, Condensation and Precipitation are steps of \_\_\_\_\_ cycle.
- vi) Pyramid of Energy is always \_\_\_\_\_.
- vii) The concentration of \_\_\_\_\_ is highest in our atmosphere.
- viii) The sources of air pollutants which can move are known as \_\_\_\_\_ sources.
- ix) Excessive nutrient growth in water bodies is called as \_\_\_\_\_.
- x) The resources which can be regenerated are known as \_\_\_\_\_ resources.

**B) Multiple Choice Questions (Each of 0.5 Mark) (10)**

- i) Vermicomposting is done by \_\_\_\_\_.  
a) fungus    b) animals    c) bacteria    d) worms
- ii) Air pollution is caused by \_\_\_\_\_.  
a) Sewage    b) Insecticides    c) Loud speakers    d) Smoke
- iii) Which one the following is not biodegradable?  
a) earthworm    b) fruits    c) Aluminium Foil    d) vegetables
- iv) If waste materials contaminate the source of drinking water which of the following diseases will spread?  
a) Cholera    b) Malaria    c) Asthma    d) Alzheimer
- v) Biotic environment includes  
a) Consumers    b) Producers    c) Decomposers    d) All of above
- vi) The group of organisms which convert light into food are called  
a) decomposers    b) autotrophs    c) omnivores    d) heterotrophs
- vii) What will be the outcome of Eutrophication of surface waters?  
a) Decrease in nitrogen concentration  
b) Decrease in phosphorus concentration  
c) Decrease in both nitrogen and phosphorus concentrations  
d) Overproduction of biomass

- viii) Which one of the following is the cleanest source of energy?  
 a) Hydro Power      b) Fossil Fuel      c) Geothermal Energy      d) Bio Fuels
- ix) Group of individuals of the same species that share common attributes are called:  
 a) Community      b) Population      c) Ecotype      d) Society
- x) Which of the following is not an important characteristic of the Green Revolution?  
 a) Mechanized Agriculture      b) Hybrid Production  
 c) Burning of Waste      d) All of above
- xi) The stage in which the biological processes is used to purify water in a wastewater treatment plants is called\_\_\_\_\_.  
 a) Primary sewage treatment  
 b) Secondary sewage treatment  
 c) Tertiary sewage treatment  
 d) Advanced treatment
- xii) Municipal and industrial discharge pipes are \_\_\_\_\_ type of sources of pollution.  
 a) Non-Point      b) Irrigation      c) Point      d) Mobile
- xiii) The lowest layer of atmosphere is \_\_\_\_\_.  
 a) stratosphere      b) Mesosphere      c) Troposphere      d) Exosphere
- xiv) World Water day is celebrated on \_\_\_\_\_.  
 a) 25<sup>th</sup> March      b) 20<sup>th</sup> March  
 c) 26<sup>th</sup> March      d) 22<sup>nd</sup> March
- xv) Decomposers include  
 a) Fungi      b) Bacteria      c) Both      d) Animals
- xvi) What is the harm from the depletion of Earth's ozone layer?  
 a) The oxygen content of the atmosphere will decrease  
 b) The average temperature of earth's surface will increase gradually  
 c) Increased amount of Ultra violet radiation will reach earth's surface  
 d) Sea levels will rise as the polar ice caps will gradually melt
- xvii) One of the best solutions to get rid of non-biodegradable wastes is \_\_\_\_\_.  
 a) Burning      b) Dumping      c) Burying      d) Recycling
- xviii) The layer of atmosphere containing much of ozone gas is  
 a) Thermosphere      b) Troposphere  
 c) Stratosphere      d) Mesosphere
- xix) Which of the following is a primary contributor to the greenhouse effect?  
 a) Carbon monoxide      b) Carbon dioxide  
 c) Sulphur dioxide      d) Nitrogen dioxide
- xx) As the temperature increases, amount of dissolved oxygen in water \_\_\_\_\_.  
 a) Does not affected      b) Increases  
 c) Decreases      d) Can't Say

## Q.2

A) Define the following (Any five out of seven questions)

(05)

- (1) Biosphere
- (2) Ecosystem
- (3) Aerosols
- (4) Pollutants
- (5) Smoke
- (6) Fog
- (7) Water Pollution

**B) Answer the following (Any five out of seven questions) (05)**

- (1) With the increase in height, the density of air **Increase/Decrease**.
- (2) World Environment Day is celebrated on which day?
- (3) What is Global Warming?
- (4) Write effect of Carbon monoxide on human health.
- (5) What should be the pH of potable water?
- (6) Which law is used to conserve forest area in India?
- (7) Which kind of diseases are occurred due to consumption of unhealthy water?

**Q.3 Write Short notes (Any five out of six questions) (10)**

- (1) What are the objectives of Environmental Studies?
- (2) What are the steps towards mitigation of global environmental issues?
- (3) Draw structure of ecosystem.
- (4) What are the major reasons for the destruction of natural resources?
- (5) Differentiate between non-renewable and renewable resources.
- (6) Enlist physical characteristics of water.

**Q.4 Long Questions (Any three out of four questions) (15)**

- (1) Explain Nitrogen Cycle with a neat sketch.
- (2) Define ecological pyramid? Enlist its types and explain any one in detail.
- (3) Enlist the Environmental acts existing in India and explain any one in detail.
- (4) Explain in detail the treatment to wastewater.