

**PARUL UNIVERSITY**  
**FACULTY OF AGRICULTURE**  
**B.Tech. Agriculture Engineering Summer 2018 - 19 Examination**

**Semester: 2**  
**Subject Code: 20103154**  
**Subject Name: Environmental Science and Disaster Management**

**Date: 17/04/2019**  
**Time: 02:00 pm to 04:00 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 movement of earthy materials from higher region to lower region due to gravitational pull is called \_\_\_\_\_.
- ii) A place inside earth where Earthquake originates is called \_\_\_\_\_
- iii) Full form of NDMA is \_\_\_\_\_
- iv) In vulnerability analysis scale is \_\_\_\_\_
- v) Nuclear attack is \_\_\_\_\_ type of disaster.
- vi) Volcanic eruption is \_\_\_\_\_ type of disaster.
- vii) Full form of UNESCO is \_\_\_\_\_
- viii) Full form of DDMA is \_\_\_\_\_
- ix) The study of interaction of organisms on land is called \_\_\_\_\_
- x) Fire in forest is the causes of \_\_\_\_\_ pollution.

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

- i) Select the correct option:  
 (1) Hazard is \_\_\_\_\_.  
 (a) Condition (b) a calamity  
 (c) an accident (d) Rescue Operation
- ii) The theory of plate tectonics states that rigid plates are driven by forces within the Earth and interact by \_\_\_\_\_  
 (a) colliding with each other (b) pulling apart from each other  
 (c) Sliding past each other (d) All of these.
- iii) Landslide move along a surface of rupture that is curved and concave is  
 (a) Rotational slides (b) Translational slides  
 (c) Rock fall (d) All of these.
- iv) The study of interaction of organisms in water is called \_\_\_\_\_  
 (a) Aquatic ecology (b) Terrestrial ecology  
 (c) Forest ecology (d) None of these
- v) Animal is a \_\_\_\_\_.  
 (a) Biotic component (b) A biotic component  
 (c) Ecosystem (d) None of these
- vi) Tsunamis waves generated by \_\_\_\_\_  
 (a) Underwater landslides (b) Earthquake (c) Volcanic eruption (d) All of above
- vii) Landslides occurs due to \_\_\_\_\_  
 (a) Gravity (b) heavy rainfall (c) mining (d) all of these.
- viii) Which seismic zone is most sever in India? \_\_\_\_\_  
 (a) Zone I (b) Zone II (c) Zone IV (d) Zone V

- ix) Lowest Layer of atmosphere is called  
 a) Thermosphere b) Stratosphere c) Troposphere d) Mesosphere
- x) In earthquake \_\_\_\_\_types of waves reaches to the seismic station first.  
 (a) P (b) S (c) W (d) V
- xi) The chairperson of SDMA in India is \_\_\_\_\_  
 (a) Prime Minister (b) President (c) Chief Minister (d)Home Minister
- xii) Of the following, which is not a natural disaster \_\_\_\_\_  
 (a) Nuclear explosion (b) Deforestation (c) Forest fire (d) Lightning
- xiii) Of the following, which is not a manmade disaster \_\_\_\_\_  
 (a) Nuclear explosion (b) Deforestation (c) Terrorist attack (d) Hiroshima Nagasaki disaster
- xiv) In which layer of atmosphere the temperature increase as the altitude increase  
 a) Troposphere b) Mesosphere c) Stratosphere d) Exosphere
- xv) Environmental Education should be imparted only at  
 a) Secondary school stage b) Primary school stage c) College stage d) All stages
- xvi) World Environment day is celebrated every year on  
 a) 5<sup>th</sup> June b) 18<sup>th</sup> July c) 22<sup>nd</sup> April d) 31<sup>st</sup> May
- xvii) Atmosphere has following major constituents  
 a) Nitrogen, Oxygen and Argon b) Carbon dioxide and Nitrogen  
 c) Ozone, Methane and Nitrogen d) Nitrogen, Ozone and Oxygen
- xviii) Lithosphere means  
 a) Plants b) Vegetation c) Outer earth crust/ soil d) Water
- xix) Hydrosphere includes  
 a) Animals b) Soil c) Plants d) Water bodies
- xx) Area of land, water and air where the life exists is called  
 a) Biosphere b) Lithosphere c) Atmosphere d)Hydrosphere

## Q.2

**A) Define the following (Any five out of seven questions) (05)**

- (1) Define ecology.
- (2) Define ecosystem.
- (3) Write examples of ecosystem.
- (4) Define Environmental Science.
- (5) Define disaster.
- (6) Define hazard.
- (7) Define renewable sources.

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

- (1) Define non renewable sources.
- (2) Enlist biological resources.
- (3) Define epicenter.
- (4) Define focus.
- (5) Define capacity development.
- (6) Name the gas that is responsible for casualties in “Bhopal gas tragedy”.
- (7) Define Richter scale.

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

- (1) Sketch the cycle of disaster management.
- (2) Define marine pollution.
- (3) Define population density.
- (4) Enlist different types of landslides.
- (5) Classified ecology as per different form.
- (6) Discuss function of ecosystem.

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

**(15)**

- (1) Define early warning system (EWS). Explain early warning system for flood and earthquake.
- (2) Explain water cycle with diagram.
- (3) Explain Ozone layer depletion.
- (4) Explain causes and effects of global warming.