

Name : .....

Roll No. : .....

Invigilator's Signature : .....

**CS/BCA/SEM-4/HU(BCA)-401/2010**

**2010**

**ENVIRONMENT AND ECOLOGY**

Time Allotted : 3 Hours

Full Marks : 70

*The figures in the margin indicate full marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

**GROUP - A**

**( Multiple Choice Type Questions )**

1. Choose the correct alternatives for any ten of the following : 10 × 1 = 10

i) Which of the following acids is present in normal rain ?

- a) Carbonic acid                      b) Sulphuric acid  
c) Hydrocarbonic acid              d) Nitric acid.

ii) Trickling filter is used under

- a) Primary treatment              b) Secondary treatment  
c) Tertiary treatment              d) Advanced treatment.

iii) El Nino is natural phenomenon that is observed on

- a) Indian ocean                      b) Bay of Bengal  
c) Pacific ocean                      d) All of these.

4225

[ Turn over

- iv) Which one of the following is biotic factor of ecosystem ?
- a) Solar energy                      b) Temperature  
c) Soil                                      d) Consumer.
- v) Bhopal gas tragedy happened on
- a) 3rd December, 1986      b) 3rd December, 1984  
c) 3rd June, 1986              d) 3rd June, 1984.
- vi) Tinnitus is a disease caused by
- a) Air pollution                      b) Water pollution  
c) Land pollution                  d) Noise pollution.
- vii) Identify the cause of eutrophication :
- a) Increase of pathogen  
b) Increase of COD  
c) Increase of algae productivity  
d) Increase of DO.
- viii) Lithosphere consist of
- a) Earth's crust, mantle and core  
b) soil and rock  
c) only soil  
d) magma and soil.
- ix) The World Environment Day is celebrated on
- a) 4th January                      b) 5th June  
c) 12th December                  d) 15th June.
- x) Greenhouse effect is caused by
- a) CO                                      b) CO<sub>2</sub>  
c) SO<sub>2</sub>                                      d) N<sub>2</sub>.

- xi) Long distance radio communication is possible due to presence of
- |                 |                 |
|-----------------|-----------------|
| a) Troposphere  | b) Stratosphere |
| c) Thermosphere | d) Exosphere.   |
- xii) Stone cancer of Taj Mahal is caused by
- |              |         |
|--------------|---------|
| a) Acid rain | b) Smog |
| c) UV ray    | d) CFC. |

**GROUP - B**

**( Short Answer Type Questions )**

Answer any *three* of the following.  $3 \times 5 = 15$

2. Define and classify the biotic components of ecosystem.
3. What is ecological pyramid ? Give suitable example.
4. Define Global warming. State how the greenhouse gases cause global warming.
5. Highlight the impact of noise pollution on human health.
6. Draw a Schematic diagram of waste water treatment.

**GROUP - C**

**( Long Answer Type Questions )**

Answer any *three* of the following.  $3 \times 15 = 45$

7. a) How are the pollutants dispersed in the form of smoke from the chimney of industries ? When and why was the "Green Bench" setup ?
- b) State the role of NGOs in environmental protection.

$( 7 + 3 ) + 5$

CS/BCA/SEM-4/HU(BCA)-401/2010

8. State the impact of CO<sub>2</sub> on global warming. Explain the effect of CO on human health. What are primary & secondary pollutants ? Explain how primary pollutant is transformed into secondary pollutant. 4 + 6 + 2 + 3
9. What do you mean by eutrophication ? Explain with the help of diagram, the three-stage sewage treatment. What is hydrosphere ? Mention the major sources of ground water pollution. 3 + 5 + 3 + 4
10. What is 'Chipko Movement' ? Give an explanation on Chipko Movement. State the impact of this movement in Indian society. 2 + 10 + 3
11. Write notes on any *three* of the following : 3 × 5
- i) Pollution Control Board of India
  - ii) Stockhome Conference, 1972
  - iii) Ganga Action Plan
  - iv) Ozone layer depletion
  - v) Bio-diversity.
-