

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.

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- 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) CO₂
c) SO₂ d) N₂.

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- 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.

$(7 + 3) + 5$

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8. State the impact of CO₂ 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.
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