



Name : .....

Roll No. : .....

Invigilator's Signature : .....

**CS/BCA/SEM-4/HU-401/2013**

**2013**

**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 answers for the following :

10 × 1 = 10

- i) Which one 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) Toxic metal when mixes with water causes
  - a) Environmental pollution
  - b) Noise pollution
  - c) Air pollution
  - d) Water pollution.



- iv) El-Nino is natural phenomenon that is observed on
- a) Indian Ocean
  - b) Bay of Bengal
  - c) Pacific Ocean
  - d) All of these.
- v) The atmospheric layer adjacent to earth's surface is
- a) Lithosphere
  - b) Troposphere
  - c) Stratosphere
  - d) Ozonosphere.
- vi) Oxygen-demanding wastes refer to
- a) Organic matter
  - b) Inorganic matter
  - c) Plastic
  - d) Metals.
- vii) BOD means
- a) Biological Oxygen Demand
  - b) Biochemical Oxygen Demand
  - c) Biggest Oxygen Demand
  - d) None of these.
- viii) Medha Patekar is involved in the
- a) Chipko Movement
  - b) Silent Valley Movement
  - c) Narmada Bachao Movement
  - d) None of these.
- ix) Minamata disease is related to
- a) Water pollution
  - b) Land pollution
  - c) Air pollution
  - d) None of these.
- x) According to the ecological food chain man is a/an
- a) decomposer
  - b) producer
  - c) consumer
  - d) none of these.



**GROUP – B**

**( Short Answer Type Questions )**

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

2. Define concept of ecological food chain. What are the different types of food chain ?  $2 + 3$
3. Give an idea of environmental impact assessment.
4. Define Ecosystem. What are its components ?  $2 + 3$
5. What are the various methods of disposal of solid wastes ?
6. Define Bio-diversity. Classify different types of bio-diversity.  $2 + 3$

**GROUP – C**

**( Long Answer Type Questions )**

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

7. What are the different sources of water pollution ? How do they cause water pollution ? What is ground water pollution ?  $3 + 8 + 4$
8. What are the various causes and effects of Global Warming ? What can we do to combat Global Warming ?  $10 + 5$
9. How would you classify noise under different categories ? What are the permissible levels of noise in residential areas, business areas, and sensitive areas ? Suggest some measures of noise pollution control.  $6 + 3 + 6$

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10. What is active sludge ? Describe the activated sludge treatment process of sewage with a neat flow diagram. 3 + 12

11. Write short notes on any *three* of the following : 3 × 5 = 15

- a) Ozone layer depletion
- b) Trickling filter
- c) Biomagnification
- d) Adverse effect of heavy metals in natural and waste water.
- e) Biodiversity.

