



Name :

Roll No. :

Invigilator's Signature :

CS/B.OPTM/SEM-2/BO-204/2012

2012

ENVIRONMENT & 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 any *ten* of the following :

10 × 1 = 10

- i) The World Environment Day is celebrated on
 - a) 5th January
 - b) 5th June
 - c) 10th January
 - d) 10th June.
- ii) The most powerful eye irritant present in smog is
 - a) NO
 - b) SO₂
 - c) PAN
 - d) O₃.
- iii) Biodiversity means
 - a) Lithosphere
 - b) The living natural resources
 - c) Micro-organism only
 - d) Seas and ocean.



- iv) Troposphere is a part of
- a) Atmosphere b) Stratosphere
- c) Mesosphere d) Lithosphere.
- v) "Arabari Model" in West Bengal is famous for
- a) Solar Power
- b) Rain water harvesting
- c) Chipko movement
- d) Joint forest management.
- vi) Gravitational settling chamber is used to control
- a) Air pollution b) Water pollution
- c) Noise pollution d) Land pollution.
- vii) Soot is the cause of
- a) Cancer b) Asthama
- c) Respiratory problems d) All of these.
- viii) The normal hearing frequency range is
- a) 20 – 30 dB b) 30 – 40 dB
- c) 60 – 80 dB d) 80 – 100 dB.
- ix) Advanced water treatment is
- a) Physical process b) Chemical process
- c) Bio-chemical process d) Biological process.
- x) Cadmium has bio-chemical effect on
- a) bone b) lungs
- c) both (a) and (b) d) none of these.



xi) Which of the following is a non-biodegradable pollutant ?

- a) DDT
- b) Cellulose
- c) Detergents
- d) Organic matter.

xii) Photochemical smog was first observed in

- a) London
- b) Canada
- c) Los Angeles
- d) Japan.

GROUP - B

(Short Answer Type Questions)

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

- 2. What is eutrophication ? What is its effect on aquatic organism ?
- 3. Give the role of environmental NGOs.
- 4. What is acid rain ? Give its harmful effects.
- 5. Give a brief note on biomes.
- 6. Give the mechanism of action of electrostatic precipitation.

GROUP - C

(Long Answer Type Questions)

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

- 7. What are the differences between sound and noise ? Classify different types of noise and write in brief their possible control measures. What is the impact of Noise pollution on human being ? $3 + 7 + 5$
- 8. Discuss the nitrogen cycle with proper flow diagram. Ozone acts as a pollutant in atmosphere and also as an umbrella in stratosphere. Justify with reasons. $7 + 8$

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9. Explain the role of different greenhouse gases in increasing the temperature of the earth. What are the measures necessary to face this problem of global warming ? 10 + 5
10. Why are environmental issues getting too much importance in recent days ? Do you agree with energy from waste ? What is cool roof concept and how is it helpful in energy conservation ? 5 + 5 + 5
11. What is standard 5 days BOD test ? What are the impacts of surface water pollution ? 6 + 9
12. Write down the methods of dispersion of pollutants (smoke) within the atmosphere. Discuss the collection and disposal methods of municipal solid waste. 8 + 7
