



## ENGINEERING &amp; MANAGEMENT EXAMINATIONS, JUNE - 2009

**ENVIRONMENT AND ECOLOGY****SEMESTER - 4**

Time : 3 Hours ]

[ Full Marks : 70

**GROUP - A****( Multiple Choice Type Questions )**

1. Choose the correct alternatives for the following :

10 × 1 = 10

i) The most potentially renewable energy resource is

a) sunlight

b) wind

c) tidal energy

d) biomass. 

ii) The causes of eutrophication is

a) increase of pathogens

b) increase of COD

c) increase of BOD

d) increase of algal productivity. 

iii) Pedology is related to

a) sun

b) soil

c) noise

d) home. 

iv) 'Montreal Protocol' is related to

a) water pollution

b) air pollution

c) land pollution

d) noise pollution.



**GROUP - B****( Short Answer Type Questions )**Answer any *three* of the following.

3 × 5 = 15

2. Give an idea of formation of Acid Rain. Mention any three harmful effects of it. 2 + 3
3. How do you give an idea of Environmental Impact Assessment ?
4. Analyse the various methods of disposal of solid wastes.
5. Write down the effects of noise pollution on health.
6. Distinguish between sulphurous smog and photochemical smog.

**GROUP - C****( Long Answer Type Questions )**Answer any *three* of the following.

3 × 15 = 45

7.
  - a) What is greenhouse effect ? Explain with the help of neat diagram.
  - b) State the different greenhouse gases and sources.
  - c) What are the different effects of greenhouse gases ? 6 + 4 + 5
8.
  - a) Mention the sources of ground water pollution.
  - b) Explain with the help of a neat diagram, the waste water treatment.
  - c) What is biological oxygen demand and why is it less than the value of theoretical oxygen demand ? 3 + 8 + 4
9.
  - a) What are the factors governing the impact of air pollution on human body ?
  - b) What are the major toxic trace metals present in particulate matter ? Indicate their sources and effect on human health.
  - c) Explain the effect of carbon monoxide and hydrocarbon on human health.
  - d) Indicate both the critical and chronic effects of arsenic, lead and ionized radiation on animals. 2 + 4 + 3 + 6



10. a) Define noise pollution.
- b) Mention the sources of noise pollution.
- c) Explain the various noise control methods at its source, path as well as receiving end.

2 + 4 + 9

11. Write notes on any two of the following :

2 × 7  $\frac{1}{2}$

- a) Filter Bag Unit for controlling Air Pollution.
- b) Food chain & Food web
- c) Montreal Protocol
- d) Renewable energy source.

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END