Utech
Name :
Roll No. :
Invigilator's Signature :
CS/B.PHARM(NEW)/SEM-2/HU-202/2012

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)

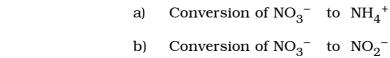
1. Choose the correct alternatives from the following :

 $10 \times 1 = 10$

- i) Which one of the following is not normally a pollutant ?
 - a) Carbon monoxide b) Carbon dioxide
 - c) Hydrocarbons d) Sulphur dioxide.
- Global agreement in specific control strategies to reduce the release of ozone depleting substances, was adopted by
 - a) Thre Viena Convention
 - b) Rio de Janeiro Conference
 - c) The Montreal Protocol
 - d) The Kyoto Protocol.

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Nitrite

Sulphate

Denitrification means

iii)

iv)

a)

c)

a)

- Conversion of NH_4^+ to $NO_3^$ c)
- Conversion of NH_4^+ to N_2^- . d)
- In measurement of decibel (dB), the reference V) intensity taken is

a)
$$1 \times 10^{-12}$$
 W/m² b) 2×10^{-12} W/m²
c) 5×10^{-12} W/m² d) None of these.

- The equipment used to remove the particulate matters vi) from an emission source are
 - Scrubbers a)
 - b) Cyclone separators
 - Electrostatic precipitators c)
 - All of these. d)
- vii) Chorofluorocarbons are produced by
 - Motor vehicles a)
 - b) **Refrigeration industries**
 - Internal combustion Engines c)
 - Forest fires. d)

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Phosphate.

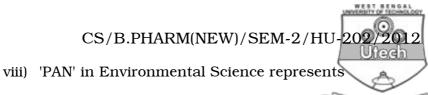
b)

d)



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- a) Perhydroxy acetate nitrate
- b) Peroxy acetyl nitrate

- Peroxy aerobic nitrate c)
- d) Peroxy anaerobic nitrate.
- ix) Which one of the following is the secondary pollutant?
 - NO O_3 b) a)
 - c) CO_3 d) CFC.

Acid rain is caused due to the mixing of rainwater with X)

a)	CO_2 & CO	b)	CO_2 & O_2
c)	$CO \& O_2$	d)	NO_x and SO_2

GROUP – B

(Short Answer Type Questions)

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

- 2. Discuss in short what you know about the components of environment.
- 3. Environmental degradation is caused by natural as well as man-made factors — discuss.
- What do you mean by ecological balance ? How is the 4. ecological balance disturbed when a polluted water is disposed of in a surface water body?
- Write in brief the principles of environmental impact 5. assessment.

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6. Write down the causes of global warming and its effects.

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GROUP – C

(Long Answer Type Questions)

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

- 7. a) What are the sources of atmospheric pollution ?
 - b) Discuss the methods to be adopted to control atmospheric pollution caused by different sources.
 - c) What are the primary and secondary air pollutants ? Which pollutants are responsible for the formation of smog in atmosphere ? 5 + 5 + 5
- 8. a) Discuss the different sources of water pollution.
 - b) Explain why we are much concerned about the organic pollution of a water body. How this pollution is prevented ?
 - c) What do you mean by eutrophication ? How is it caused ? 5+5+5
- 9. a) Write short notes on different sources of generation of solid wastes.
 - b) What are the different methods of disposal of municipal solid wastes ?
 - c) What do you mean by segregation of municipal solid waste at its point of generation ? Why do you think this segregation is a necessity for its appropriate disposal ?

5 + 5 + 5

- 10. a) "'Noise' is nothing but an unwanted sound'." — Discuss this statement.
 - b) What harmful effects may be caused to human body due to a sound having high intensity level ?
 - c) What measures are generally adopted in an industry to prevent noise pollution and to safeguard the workers in the industry from its harmful effects ? 5 + 5 + 5

11. a) Write brief notes on arsenic pollution in ground water.

- b) Discuss on 'Environmental Lapse Rate (ELR) and 'Adiabatic Lapse Rate' (ALR).
 - c) How do you differentiate between BOD and COD with reference to a waste water. 5 + 5 + 5

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