



Printed Pages : 7

EAS105

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 3101

Roll No.

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B.Tech

(SEM I) ODD SEMESTER THEORY EXAMINATION 2009-10
ENVIRONMENT & ECOLOGY

Time : 2 Hours]

[Total Marks : 50

Note : *The question paper contains three sections. Section - A, Section - B and Section - C with the weightage of 10, 15, and 25 marks respectively. Follow the instructions as given in each question.*

SECTION - A

This question contains 10 questions of multiple choice / Fill in the blanks / True, False / Matching correct answer type questions. Attempt all parts of this section.

1 Write the correct answer of the following $1 \times 10 = 10$
multiple choice questions:

- (a) The part of environment where life forms of the earth, including human beings, live, is
- atmosphere
 - lithosphere
 - hydrosphere
 - biosphere



(b) The science that deals with the study of the individual organisms or an individual species is known as

- (i) anthropology
- (ii) autecology
- (iii) synecology
- (iv) microbiology.

(c) The main cause of 'eutrophication' of lakes is the enrichment of lake water with

- (i) carbonaceous organic matter
- (ii) nutrients
- (iii) chlorides
- (iv) water hyacinth.

Fill in the following blanks with suitable words :

(d) The part of atmosphere, where maximum concentration of ozone is generally found, is _____

(e) The transfer of food energy from the source in plants through a series of organisms with repeated eating and being eaten up is referred to as _____

(f) The unit of measurement of sound pressure level is _____

Write true or false against following statements :

(g) Anaerobic digestion of sludge takes place in the presence of oxygen. (True/False)

(h) Gastroenteritis is a water borne disease. (True/False)

(i) Match List I with List II and select the correct sequence of answers using the codes given below the lists :

List I

List II

- | | |
|-----------------------|--------------------------|
| A. Carbon monoxide | 1. Acid rain |
| B. Carbon dioxide | 2. Ozone layer depletion |
| C. Chlorofluorocarbon | 3. Asphyxiation |
| D. Sulphur dioxide | 4. Green house effect |

Code	A	B	C	D
(1)	3	4	1	2
(2)	4	3	1	2
(3)	3	4	2	1
(4)	2	1	3	4

(j) The atmosphere is divided into following four layers :

- (a) Mesosphere
- (b) Stratosphere
- (c) Thermosphere
- (d) Troposphere



The correct sequence of these layers starting from the surface of earth upwards is

A 2 4 1 3

B 4 2 1 3

C 4 2 3 1

D 2 4 3 1

SECTION - B

2 Attempt any three parts of the following : $5 \times 3 = 15$

- Define environment. Discuss the need for public awareness for the conservation and protection of the environment.
- What are the basic components of an ecosystem? Outline the concept of balanced ecosystem.
- What is deforestation? Give main causes and adverse effects of deforestation.
- Discuss some important issues relating to municipal solid waste management in India.
- Discuss how population, poverty and pollution are inter-related to one another.

SECTION - C

Note : All questions are compulsory. $5 \times 5 = 25$

Attempt any two parts from each question.

- What are ecological pyramids? Explain the different types of ecological pyramids giving suitable examples.
 - Give a brief account of environmental effects of modern agriculture.
 - What is Environmental Impact Assessment? Discuss its importance in planning and implementation of engineering projects.
- Discuss the adverse impacts of urbanization and industrialization and suggest suitable remedial measures.
 - Write a short note on sustainable development.
 - Discuss the importance of fluoride in drinking water. Briefly discuss 'Nalgonda Technique' of defluoridation of water to control the problem of fluorosis.

(a) Enumerate various types of pollutants that cause pollution of water bodies. Also discuss how water bodies can be saved from ill-effects of uncontrolled discharge of wastewater into them.

(b) Discuss how switching over to a low carbon economy can help in our efforts towards fighting against the problem of 'global warming and climate change'.

(c) Discuss the environmental aspects of animal husbandry.

(a) Discuss the problem of 'ozone layer depletion' and present a summary of international efforts taken up so far to address the problem.

(b) Briefly discuss the problem of automobile pollution and suggest suitable ways and means to control it.

(c) Discuss the role of government in environmental protection highlighting legislative and legal aspects.

(a) Explain how the initiatives taken by Non-governmental organizations are helpful in creating the public awareness and implementation of environmental protection programmes.

(b) Discuss the importance of 'women education' for the success of the schemes relating to environmental quality management and public health.

(c) What is rain water harvesting? Discuss its advantages and limitations.

