



DELHI PUBLIC SCHOOL NEWTOWN
SESSION 2025-26
MONDAY TEST

CLASS: IX
SUBJECT: ENVIRONMENTAL APPLICATIONS

FULL MARKS: 40
DATE: 28/07/25

General Instructions:

- All questions are compulsory.
- Answers should be to the point.
- Copy the question number carefully before answering the questions.
- The paper consists of *three* printed pages.

SECTION A (20 MARKS)

Question 1

Choose the correct answers to the questions from the given options.

[10]

(Do not copy the questions, write the correct answers only)

- (i) What level of ecological hierarchy includes all living organisms in a particular area interacting with each other?

(a) Ecosystem (b) Population (c) Community (d) Biome

- (ii) Choose the odd one out from the given abiotic components of ecosystem.

(a) topography (b) wind (c) humidity (d) temperature

- (iii) Study the food chain given below and answer

Grass → Grasshopper → Frog → Snake → Hawk

If trophic level 3 has 100 J of energy, how much energy will trophic level 5 have?

(a) 10,000J (b) 1000J (c) 10J (d) 1J

- (iv)



Study the picture and answer the question that follows.

Which of the following best represents the core mission of the given organization?

- (a) To promote industrial development in forested regions
(b) To protect endangered species and reduce human impact on nature
(c) To regulate international trade laws
(d) To encourage genetic modification for crop yield improvement

- (v) Which of the following is incorrect pair?

(a) Ernest Haeckel--Ecology
(b) Narmada Bachao Andolan—Sardar Sarovar Dam
(c) Gaura Devi—Appiko Movement
(d) Silent Valley Movement—Kunthipuz River

- (vi) The decomposers in an ecosystem
 (a) convert inorganic materials to simpler forms
 (b) convert organic materials to inorganic forms
 (c) covert inorganic materials to organic compounds
 (d) do not break down organic compounds
- (vii) Assertion (A): A sparrow is a primary producer when it eats seeds, fruits and peas.
 Reason (R): Sparrow belongs to secondary consumer when it eats insects and worms.
 (a) A and R are true and R explains A
 (b) A and R are true but R is not the explanation of A
 (c) A is false but R is true
 (d) A is true but R is false
- (viii) Which of the following correctly represents the sequence of ecological hierarchy from simplest to most complex?
 1. Community
 2. Population
 3. Ecosystem
 4. Organism
 (a) 1,3,2 and 4 (b) 3,1,2 and 4 (c) 2,4,3 and 1 (d) 4,2,1 and 3
- (ix) Choose the *incorrect* statement regarding Appiko movement.
 (a) It aimed to ensure people's rights to use forest produce sustainably.
 (b) The movement was primarily industrial in nature, focusing on timber production.
 (c) Appiko followed a three-pronged approach: protect, grow, and use forest resources wisely.
 (d) It was inspired by the Chipko Movement in Uttarakhand.
- (x) Which of the following are actual core functions of an ecosystem?
 1. Energy transfer between trophic levels
 2. Carrying capacity fluctuation
 3. Recycling of essential nutrients
 4. Gene editing in natural population
 (a) 1,3 and 4 (b) 1 and 3 (c) 1 and 4 (d) 2 and 4

Question 2

- (i) Why do industrial and vehicular emissions play a dominant role in the recurrence of smog episodes? [2]
- (ii) In the context of current environmental crisis, explain the relevance of studying Environmental Studies. [2]
- (iii) In a forest ecosystem, if a top predator like a tiger is removed, how might this affect the balance of the food web? Justify your answer with ecological reasoning. [3]

(iv)



Identify the festival shown in the above picture and analyse how it contributes to raising awareness.

[3]

SECTION B (20 MARKS)

Question 3

- (i) Illustrate the movement of carbon through various Earth systems and evaluate the impact of human-induced changes on this cycle. [5]
- (ii) According to the Global Forest Resources Assessment 2020 by FAO, the world lost 4.7 million hectares of forests annually between 2015 and 2020. However, countries like India have shown an increase in forest cover through various schemes and strategies. Analyze how developing countries like India can help save forests. [5]

Question 4

- (i) Analyse the impact of large multipurpose power projects in an area. [5]
- (iii) Study the picture given and answer the questions that follow [5]



- (a) Name the movement in North India that is depicted in the picture.
- (b) Give names of any two leaders associated with the movement.
- (c) Mention any two significant achievements of the movement.