

GREENLAWNS SCHOOL, WORLI

FINAL EXAMINATION: 2025-26

ENVIRONMENTAL SCIENCE

Std: IX

Marks: 80

Date:24/02/2026

Time: 2 hrs

Answers to this paper must be written on the paper provided separately. You will **not** be allowed to write during the first **10** minutes. This time is to be spent in reading the Question paper.

Section A is compulsory. Attempt **any four** questions from **Section B**.

SECTION A

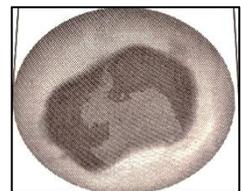
(Attempt **all** questions from this Section)

Question 1

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

[16]

- (i) Kavya was doing research on soil bacteria. She was amazed to find that soil bacteria effectively eat the compound ammonia and make proteins out of it. This process is called:
- a. Assimilation b. Nitrification c. Denitrification d. Nitrogen fixation
- (ii) The backwaters and coconut trees are the characteristic features of this zone:
- a. Semi Arid b. Coastal c. Deccan Plateau d. Western Ghats
- (iii) Chemicals like CFC and nitrous oxide break the _____ present in the stratosphere:
- a. UV rays b. Smog c. Acid rain d. Ozone
- (iv) The clearance or removal of trees where the land is thereafter converted to a non-forest use is known as:
- a. Soil erosion b. Afforestation c. Deforestation d. Desertification
- (v) The non-monetary indicators of Poverty amongst the following is:
- a. Death rate b. Global Literacy c. Polluted water d. Decline in population
- (vi) The trophic web that is based around the remnants of dead organisms is called:
- a. Detritus web b. Grazing web c. Food web d. All of these
- (vii) Which type of community is marked by the crustose-lichen stage in succession in the forest?
- a. Seral b. Intermediate c. Pioneer d. Climax
- (viii) The condition detected as shown in the given picture depicts:
- a. Arctic zone b. Antarctic zone
c. Ozone hole d. Kyoto Protocol



- (ix) Assertion: Land pollution contaminates water bodies.
Reason: Rain water and wind carry a lot of garbage and deposits it in water bodies.
- a. A is true but R is false b. A is false but R is true.
 c. Both A & R are true and R explains A
 d. Both A & R are true but R does not explain A.

- (x) Identify the biogeographic zone of India where such granite boulders are quite common:
- a. North East India b. Deccan Plateau
 c. Western Ghats d. Desert regions



- (xi) Which of the following statements about Pyramid of energy is true:
- a. Always inverted b. Always upright
 c. Sometimes inverted d. Sometimes upright

- (xii) Assertion: Vehicles release a large quantity of suspended particulate matter.
Reason: The major pollutants released from the automobiles are carbon dioxide, carbon monoxide, oxide of nitrogen, unburnt hydrocarbons, traces of lead etc.
- b. A is true but R is false b. A is false but R is true.
 c. Both A & R are true and R explains A
 d. Both A & R are true but R does not explain A.

- (xiii) Which of the following is not a source of Greenhouse gases?
- a. Burning of coal b. Change in weather
 c. Deforestation d. Transportation

(xiv) Match the following:

	Column I		Column II
1.	Photochemical smog	A	The normal decrease in air temperature with increasing altitude is reversed
2.	Thermal inversion	B	Combination of smoke and fog
3.	Smog	C	The pollutants are formed by chemical interaction between primary pollutants and chemicals present in atmosphere
4.	Secondary pollutants	D	Chemical reaction of sunlight, nitrogen oxides and volatile organic compounds in the atmosphere

- a. 1-D, 2- A, 3-C, 4-B b. 1-D, 2-A, 3-B, 4-C
 c. 1-A, 2-D, 3-B, 4-C d. 1-B, 2-C, 3-A, 4-D

- (xv) JFM stands for:
- a. Joint Forest Mining b. Joint Fishes Management
 c. Joint Fishes Mining d. Joint Forest Management

- (xvi) Which among the following is not an effect of soil erosion?
- a. Generation of wastelands
 - b. Generation of Nuclear wastes
 - c. Loss of soil fertility
 - d. Desertification

Question 2

- (i) When is the International day for eradication of poverty celebrated? What is its aim? [2]
- (ii) Why is lead considered to be one of the most hazardous pollutants? [2]
- (iii) What is meant by global warming? [2]
- (iv) Mention any two characteristics of Trans-Himalayan zone of India. [2]

Question 3

- (i) Define Agro forestry. List its use. [2]
- (ii) Differentiate between weather and climate. [2]
- (iii) How is wood fuel useful to us? [2]
- (iv) What are the two effects of human activities on Carbon cycle? [2]

Question 4

- (i) Which is the largest unit of the Great Plain of India? Name its two main rivers. [2]
- (ii) How have human activities greatly intensified the natural greenhouse effect? [2]
- (iii) Discuss climax community in brief. [2]
- (iv) Energy flow in the ecosystem is unidirectional. Explain. [2]

SECTION B

*(Attempt **any four** questions from this section)*

Question 5

- (i) Meenu came across many new bacteria involved in a Nitrogen cycle. Can you help her in making a whole nitrogen cycle? Also write down the steps involved in nitrification. [5]
- (ii) Suraj visited Sahyadri in Maharashtra and Nilgiri Hills in Karnataka while visiting his cousins during the summer vacations. Which geographic zone did she cover? Discuss the climate, flora and fauna of this region. Name the hills that is left uncovered. [5]

Question 6

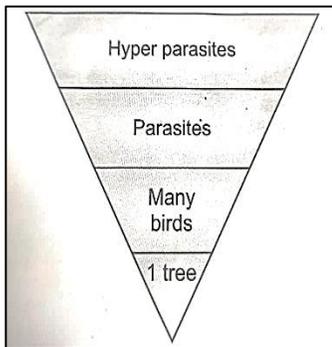
- (ii) Dheeraj saw the recent picture of Taj Mahal in which he could clearly see the monument getting a yellow coat of polluted rain deposited over it. His father made him understand more in detail. Can you note down what Dheeraj's father explained to him about the:
 - a. Two causes of acid rain.
 - b. Three effects of acid rain on living organisms.



- (ii) How can ozone depletion be controlled? [5]

Question 7

- (i) Prisha is not convinced that Pyramid of numbers can be inverted in some cases. Her teacher showed her the bellow given picture the other day and told her to note down the following details:



- a. Name the food chain showing inverted pyramid of numbers. How is it different from the upright one? [2]
- b. Explain this pyramid in your own words. [2]
- c. What are the other two food pyramids known to you? [1]

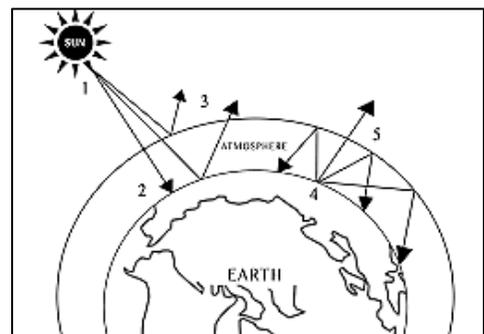
- (ii) What are the different stages in succession from a bare rock to a complete forest? Write about Moss and herbaceous stage in detail. [5]

Question 8

- (i) Why does California experience Thermal inversion? What are its effects? [5]
- (ii) Bhavya went to his village and saw people suffering from extreme poverty during these days. After a lot of brainstorming, his friend Aayush helped him to understand the reasons behind this new occurrence. Can you understand how environment and poverty got related? [5]

Question 9

- (i) Snigdha studied the phenomenon shown here. She gave her test the following day. Help her with the following questions in the test:
- a. What is the name given to this phenomenon?
- b. Why does it happen?
- c. What are the gases mainly responsible? Mention any four.



- (ii) Enumerate different human activities that lead to soil erosion. [5]
