

GREENLAWNS HIGH SCHOOL
SEMESTER I EXAMINATION
Environmental Studies
X – 5/01/24

Maximum Marks: 80

Time allowed: Two hours

Answers to this Paper must be written on the paper provided separately.

.The time given at the head of this Paper is the time allowed for writing the answers.

Attempt all the questions from Section A. Attempt any four questions from Section B.

The intended marks for questions or parts of questions are given in brackets [].

SECTION A
(Attempt all questions)

Question 1

Choose the correct answers to the questions from the given options.
(Do not copy the question, Write the correct answer only.)

[16]

- (i) Which one of the following is an effect of soil erosion?
- | | |
|-----------------------|---------------------|
| (a) Torrential rain | (b) Flood |
| (c) Movement of winds | (d) Desertification |
- (ii) Advantage of catalytic converter is
- | | |
|----------------------------------|----------------------------------|
| (a) reduces quantity of emission | (b) reduces horsepower |
| (c) increases fuel consumption | (d) increases engine overheating |
- (iii) Which of the following is **not** a vegetative practice of soil erosion control
- | | |
|------------------|-------------------|
| (a) Mulching | (b) Bunds |
| (c) Foliage crop | (d) Crop rotation |

(iv) Earth's biologically richest and most endangered terrestrial ecoregion is known as

- (a) gene bank
- (b) biosphere reserve
- (c) hotspots
- (d) wildlife sanctuary

(v) During the fourth stage of demographic transition there are

- (a) low birth rates and low death rates
- (b) high birth rates and low death rates
- (c) low birth rates and high death rates
- (d) high birth rates and high death rates

(vi) A sustainable city is designed with a goal to minimize _____.

- (a) elderly population
- (b) energy outputs
- (c) energy inputs
- (d) eutrophication

(vii) The Chernobyl disaster occurred in

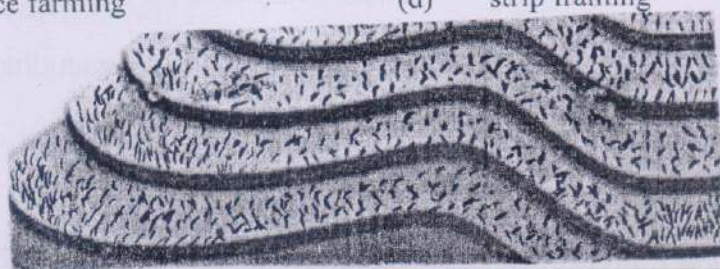
- (a) Germany
- (b) Ukraine
- (c) Poland
- (d) Belarus

(viii) Coppice forest system does not originate/develops from

- (a) stumps
- (b) root suckers
- (c) shoots
- (d) seeds

(ix) The figure given below refers to the soil conservation practice of

- (a) dry farming
- (b) contour farming
- (c) terrace farming
- (d) strip farming



- (x) Species which are most likely to become extinct worldwide are known as
- (a) extinct (b) critically endangered
(c) vulnerable (d) endangered

(xi) Assertion (A) – Bhopal gas tragedy was a gas leak incident in India.

Reason (R) – Most of the MIC gas related safety systems were not functioning and many valves and lines were in poor condition.

- (a) Both A and R are correct (b) Both A and R are incorrect
(c) A is false and R is true (d) A is false and R is false for A

(xii) Statement A : The Earth Summit does not address issues related to water scarcity.

Statement B : The Earth Summit resulted in the convention on Biodiversity.

- (a) Both statement A and statement B are correct
(b) Both statement A and statement B are incorrect
(c) Statement A is correct and statement B is incorrect
(d) Statement A is incorrect and statement B is correct

(xiii) Match column 1 with column 2 and choose the correct option from those given below

- | Column 1 | Column 2 |
|-----------------------------------|-------------------------------------|
| (1) GEF | (A) CFC to be phased out by 2000 |
| (2) CITES | (B) Biodiversity |
| (3) Kyoto Protocol | (C) Endangered species conservation |
| (4) Montreal Protocol | (D) Reduction of green house gases |
| (a) 1 - C , 2 - B , 3 - D , 4 - A | |
| (b) 1 - B , 2 - C , 3 - A , 4 - D | |
| (c) 1 - B , 2 - D , 3 - C , 4 - A | |
| (d) 1 - B , 2 - C , 3 - D , 4 - A | |

The following questions (xiv to xvi) are based on the figure given . Answer these questions by choosing the correct option.

figure 1.6 on next page

(xiv) Identify the device shown above.

- (a) cyclone separators (b) wet scrubber
(c) bag filters (d) gravity settling chambers

(xv) Shown device remove particles within the range of

- (a) 10 – 15 μm (b) 10 – 50 mm
(c) 10 – 50 μm (d) 10 – 15 mm

(xvi) This device is widely used in

- (a) I.T. industry (b) cement industry
(c) Hospitality (d) Hospitals

Question 2

- (i) Define core and buffer area. [2]
(ii) What is biodiesel? [2]
(iii) What is debt trap? Give reason for poverty and environmental degradation in developing countries [2]
(iv) Discuss Global Interdependence. [2]

Question 3

- (i) What is Gasohol? [2]
(ii) What is rationale behind the Ramsar convention? [2]
(iii) Define wildlife. Discuss the need to protect it. [2]
(iv) What is bio fertilisers? Give two examples. [2]

Question 4

- (i) What is energy plantation? [2]
- (ii) Write 2 natural causes of soil erosion. [2]
- (iii) Define bioremediation. [2]
- (iv) Give 2 features of a green building. [2]

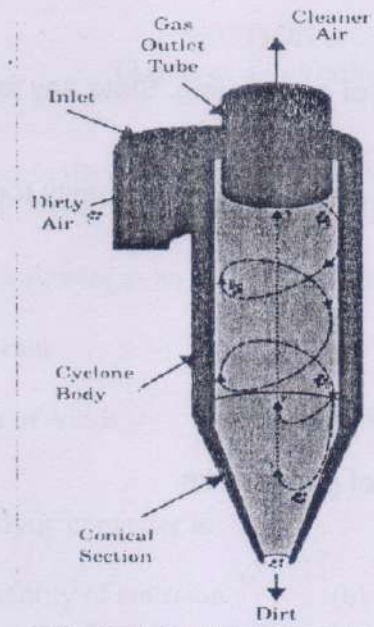


Fig 1.6

SECTION B

(Attempt any four questions from this section)

Question 5

- (i) Describe five ways of reducing air pollution from domestic sources? [5]
- (ii) Discuss five effective personal initiatives to reduce vehicular pollution. [5]

Question 6

- (i) Explain how population growth is linked to climate change. [5]
- (ii) Write briefly on integrated rural development. [5]

Question 7

- (i) Describe the process of composting. State any four advantages of using compost. [5]
- (ii) What are the reasons for failure of community forestry in India? [5]

Question 8

- (i) Write five alternatives to timber? [5]
- (ii) Discuss the concept of gene banks. [5]

Question 9

- (i) Distinguish between In situ and Ex situ conservation. (Five points) [5]
- (ii) Write short note on CITES. [5]

Question 10

- (i) Discuss hydrogen as an alternative fuel. [5]
- (ii) Explain contributions of multi-national companies towards the environment. [5]