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63 (FY)SEM-1/VAC/ENGVAC1014

2025

ENGLISH
(VAC)

Paper : ENGVAC1014

(Ecology and Environment)

Full Marks : 70

Pass Marks : 28

Time : Three hours

**The figures in the margin indicate
full marks for the questions.**

1. Choose the correct answer : $1 \times 10 = 10$

(a) Which of the following is a biotic component of an ecosystem ?

(i) Sunlight

(ii) Water

(iii) Bacteria

(iv) Temperature

(b) What are the main causes of depletion of natural resources ?

- (i) Conservation efforts
- (ii) Overuse and pollution
- (iii) Recycling
- (iv) Reforestation

(c) Which of the following Environmentalists first gave the concept of Biodiversity 'hotspots' ?

- (i) Gaylord Nelson
- (ii) Norman Mayers
- (iii) John Muir
- (iv) Julia 'Butterfly' Hill

(d) In which year was the Wildlife Protection Act passed in India ?

- (i) 1952
- (ii) 1972
- (iii) 1982
- (iv) 1992

(e) Which international agreement focuses on reducing deforestation and forest degradation ?

- (i) Kyoto Protocol
- (ii) Paris Agreement
- (iii) REDD+ (Reducing Emissions from Deforestation and Forest Degradation)

(iv) Montreal Protocol

(f) The concept of 'sustainable development' was popularized by_____.

- (i) Brundtland Report
- (ii) Kyoto Protocol
- (iii) Rio Declaration
- (iv) Paris Agreement

(g) In which year was The first major amendment made to the Wildlife Protection Act ?

- (i) 1975
- (ii) 1982
- (iii) 1991
- (iv) 2000

(h) Which sector is most responsible for greenhouse gas emissions globally?

(i) Agriculture

(ii) Transportation

(iii) Energy and electricity production

(iv) Forestry

(i) In a food chain which of the following is always at the first trophic level?

(i) Producer

(ii) Primary Consumer

(iii) Secondary Consumer

(iv) Decomposers

(j) The unit commonly used to measure energy in the pyramid of energy is -

(i) Joules or Calories

(ii) Number of Organisms

(iii) Kilograms

(iv) Liters

2. Answer the following questions : **(any five)**
2×5=10

(a) Define an ecosystem.

(b) Explain the term 'Hydrological Cycle'.

(c) Why is the Ozone layer important for life on the Earth?

(d) State the difference between endangered and extinct species.

(e) How does deforestation contribute to global warming?

(f) Explain why fossil fuels are considered non-renewable resources.

(g) What is the significance of the Earth Summit for Global Environmental Policy?

3. Answer the following questions : **(any six)**
5×6=30

(a) What are the key objectives of the Wildlife Protection Act, 1972?

(b) How did The Chipko Movement contribute to environmental conservation?

- (c) Explain the importance of biodiversity in maintaining the stability of an ecosystem.
- (d) Discuss the causes and consequences of water pollution. Mention *two* ways to prevent it.
- (e) Describe the role of energy in food chains.
- (f) What role does public awareness and education play in preventing and responding to nuclear hazards?
- (g) Describe the relationship between population growth and sustainable development.
- (h) Write a short note on the Montreal Protocol and its achievements.
- (i) How does The Ramsar Convention promote sustainable use of wetlands?

4. Answer the following questions : **(any two)**
10×2=20

- (a) Evaluate the impact of deforestation on biodiversity.
- (b) What are greenhouse gases? Explain their role in global warming with examples.

- (c) Discuss the challenges faced by governments in implementing environmental protection measures.
 - (d) Describe the methods used for *in-situ* and *ex-situ* conservation of biodiversity.
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