### 2021

(CBCS)

(4th Semester)

#### **ENVIRONMENTAL STUDIES**

FOURTH PAPER

(Compulsory Foundation Course)

Full Marks: 75

Time: 3 hours

### **INSTRUCTIONS TO CANDIDATES**

( Please read the instructions carefully before you start writing your answers )

- 1. Questions should be attempted as per instructions.
- 2. Do not copy the Questions. Indicate the Section and Question No. clearly while attempting the answer.
- 3. For Multiple choice answer, candidate should indicate the Question No., Sub. No., (if any) and the correct answer. For example:
  - 1. Name the State capital of Mizoram.
    - (a) Lunglei
    - (b) Aizawl
    - (c) Champhai

Candidate should provide answer as—Q. No. 1: (b) Aizawl [Candidate should **avoid** writing only (b)]

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

# ( SECTION : A-OBJECTIVE )

( *Marks* : 10 )

Choose the correct answer from the options provided:

 $1 \times 5 = 5$ 

- 1. The term 'ecosystem' was coined by
  - (a) Sir Rutherford
  - (b) Sir Arthur Tansley
  - (c) Sir J. C. Bose
  - (d) William Harvey
- 2. Plant is a/an
  - (a) biotic component
  - (b) abiotic component
  - (c) hydrosphere
  - (d) mineral resource
- 3. Windmills can be used to
  - (a) generate gas
  - (b) generate paper
  - (c) generate electricity
  - (d) gross modulation
- 4. Solar energy is a
  - (a) renewable resource
  - (b) non-renewable resource
  - (c) bioresource
  - (d) geosphere
- 5. The term 'hotspot' in nature is associated with
  - (a) electricity
  - (b) biodiversity
  - (c) pollution
  - (d) industry

6.	<b>5.</b> India is a nation.		
	(a)	meso-diverse	
	(b)	mega-diverse	
	(c)	mono-diverse	
	(d)	micro-diverse	
7.	. Which of the following is a protected area?		
	(a)	National park	
	(b)	Eco-club	
	(c)	Sand dune	
	(d)	Nursery	
8.	Noise is measured in		
	(a)	dB	
	(b)	S/cm	
	(c)	Mg	
	(d)	TB	
9.	The principle of environmental education helps to make the sense of the topic from		
	(a)	simple to complex	
	(b)	knowledge and awareness	
	(c)	skills and awareness	
	(d)	All of the above	
10.	Sile	Silent Valley Project was initially sanctioned in	
	(a)	Jharkhand	
	(b)	Kerala	
	(c)	Goa	
	(d)	Andaman & Nicobar Islands	

# ( SECTION : B—SHORT ANSWER )

( *Marks*: 15)

Write short notes on any five of the following, selecting one from each Unit:

 $3 \times 5 = 15$ 

UNIT—I

- 1. Ecological levels of organization
- 2. Major functions of an ecosystem

UNIT—II

- 3. Food resources
- 4. Classification of natural resources

UNIT—III

- 5. Non-renewable resource
- 6. Bioenergy

UNIT—IV

- 7. Levels of biodiversity
- 8. In-situ conservation

Unit-V

- 9. Sustainable development
- 10. Environmental movement

# ( SECTION : C—DESCRIPTIVE )

( *Marks* : 50 )

Answer the following questions:

 $10 \times 5 = 50$ 

#### UNIT—I

**1.** Discuss the scope, importance and multidisciplinary nature of environmental studies. 2+4+4=10

#### OR

What are ecosystem and types of ecosystems? Describe abiotic and biotic components of ecosystem. 4+6=10

### UNIT-II

**2.** Define energy resource. Explain the major types of non-renewable energy resources. 2+8=10

#### OR

What is deforestation? Elaborate the major consequences of deforestation.

2+8=10

#### UNIT—III

**3.** Define biodiversity. Write in detail the major causes and consequences of biodiversity loss. 2+4+4=10

#### OR

What is *ex-situ* conservation? Explain the different types of *ex-situ* conservation measures in detail. 2+8=10

## UNIT—IV

**4.** What is climate change? Describe the impact of climate change on human communities and agriculture. 2+8=10

### OR

Write short notes on the following:

5+5=10

- (a) Soil erosion
- (b) Ozone layer depletion

## Unit-V

**5.** What is environmental education? Discuss the goals and guiding principles of environmental education. 2+4+4=10

## OR

Write short notes on the following:

5+5=10

- (a) Chipko Movement
- (b) Appiko Movement

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