

**Professional Course Examination, May 2023**

( 4th Semester )

**BACHELOR OF COMPUTER APPLICATIONS**

( Environment and Ecology )

Full Marks : 75

Time : 3 hours

*The figures in the margin indicate full marks for the questions***( PART : A—OBJECTIVE )**

( Marks : 25 )

**SECTION—I**

( Marks : 15 )

**A. Tick (✓) the correct answer in the brackets provided : 1×10=10**

1. A biological community of interacting organisms and their physical environment is known as

(a) ecosystem ( )

(b) ecology ( )

(c) ecads ( )

(d) energy cycle ( )

2. Entire collection of all living organisms found in a given ecosystem at a given time is known as
- (a) biosphere ( )
  - (b) biome ( )
  - (c) biodiversity ( )
  - (d) biodiversity hotspot ( )
3. Earth Day is celebrated on
- (a) 22nd March ( )
  - (b) 22nd April ( )
  - (c) 23rd March ( )
  - (d) 23rd June ( )
4. Which of the following is a renewable resource?
- (a) Wind energy ( )
  - (b) Coal ( )
  - (c) Petroleum ( )
  - (d) Nuclear energy ( )
5. The number of biodiversity hotspots in the world is
- (a) 26 ( )
  - (b) 36 ( )
  - (c) 32 ( )
  - (d) 39 ( )
6. Which of the following is *ex-situ* conservation?
- (a) Zoological Park ( )
  - (b) National Park ( )
  - (c) Wildlife Sanctuary ( )
  - (d) Biosphere Reserve ( )

7. Eutrophication causes

- (a) water pollution ( )
- (b) soil pollution ( )
- (c) air pollution ( )
- (d) noise pollution ( )

8. The noise defined as noise pollution by the World Health Organization (WHO) is above

- (a) 65 decibels (dB) ( )
- (b) 75 decibels (dB) ( )
- (c) 85 decibels (dB) ( )
- (d) 95 decibels (dB) ( )

9. Chipko Movement is also known as

- (a) hug the tree movement ( )
- (b) save the tree movement ( )
- (c) silent valley project ( )
- (d) None of the above ( )

10. A social or political movement, for the conservation of environment or for the improvement of the state of the environment is

- (a) environmental education ( )
- (b) environmental movement ( )
- (c) environmental awareness ( )
- (d) All of the above ( )

B. State whether the following sentences are *True (T)* or *False (F)* by putting a Tick (✓) mark in the brackets provided :

1×5=5

1. Edaphic factors are abiotic component of ecosystem.  
( T / F )
2. Biomass energy is nonrenewable energy.  
( T / F )
3. India is one of the recognized mega-diverse countries of the world.  
( T / F )
4. Rain below 5.6 pH is termed as acidic rain.  
( T / F )
5. The term 'Appiko' in Appiko Movement means 'hugging'.  
( T / F )

#### SECTION—II

( Marks : 10 )

C. Answer the following questions :

2×5=10

1. (a) What is the concept of ecology?

OR

- (b) What is the structure of ecosystem?

2. (a) What do you mean by nonrenewable resources?

OR

- (b) What is conservation of natural resources?



3. (a) What are the causes of biodiversity loss?

**OR**

(b) What are the levels of biodiversity?

4. (a) What is global warming?

**OR**

(b) What are the control measures of noise pollution?

5. (a) What do you mean by silent valley project?

**OR**

(b) What are the objectives of Green Mizoram Network (GMN)?

**( PART : B—DESCRIPTIVE )**

( Marks : 50 )

**D. Answer the following questions :**

10×5=50

1. (a) Describe the classification and components of an ecosystem. 10

**OR**

(b) Describe the scope and importance of environmental study. 10

2. (a) Describe the causes for depletion of natural resources. 10

**OR**

(b) What are natural resources? Illustrate the basics of renewable resources. 2+8=10

3. (a) Describe the *in-situ* and *ex-situ* conservation of biodiversity. 10

**OR**

(b) What is biodiversity hotspot? Illustrate the concept of megadiversity and biodiversity hotspot. 2+8=10

4. (a) Explain the sources and causes of water pollution. 10

OR

- (b) Describe ozone layer depletion and its effects on climate change. 10

5. (a) Define sustainable development. Illustrate the concept of sustainable development. 2+8=10

OR

- (b) Write short notes on the following : 5+5=10

(i) Role of NGOs in environment development

(ii) Chipko Movement

OR

What are the objectives of the National Network (GMP)?

(PART : B—Descriptive)

(Mark : 30)

10+2+50

D. Answer the following questions :

1. (a) Describe the classification and components of an ecosystem. 10

OR

(b) Describe the scope and importance of environmental study. 10

2. (a) Describe the causes for depletion of natural resources. 10

OR

(b) What are natural resources? Illustrate the basis of renewable resources. 10

3+8=10

3. (a) Describe the in-situ and ex-situ conservation of biodiversity. 10

OR

(b) What is biodiversity? Illustrate the concept of biodiversity and biodiversity hotspot. 10

3+8=10