SECTION 'C'	$4\times10=40$			
Long Answer questions (Word limit 400-450 words.)				

## **UNIT-I**

Q. 1. Explain ecological Pyramids in detail.

OR

Describe the ecological models.

## **UNIT-II**

**Q. 2.** What are the renewable and nonrenewable resources? Explain it in detail.

OR

Explain the factors that are responsible for increase and decrease of populations.

# **UNIT-III**

Q. 3. Describe primary and secondary fresh water adaptation in detail.

OR

Describe the adaptations for terrestrial mode of life in detail.

#### **UNIT-IV**

**Q. 4.** What is stress? Explain physiological response to oxygen deficient stress.

OR

What are the factors that are responsible to avoid the stress?

-----XXX

ROLL NO.....

# Z00. 202/22

# **II SEMESTER EXAMINATION, 2022**

M.Sc. (ZOOLOGY)

PAPER-II

# ENVIRONMENTAL BIOLOGY AND ENVIRONMENT PHYSIOLOGY

**TIME: 3 HOURS** 

MAX.- 80

MIN.- 16

Note: The question paper consists of three sections A, B & C. All questions are compulsory.

Section A- Attempt all multiple choice questions.

Section B- Attempt one question from each unit.

Section C- Attempt one question from each unit.

SECTION 'A'  $2 \times 8 = 16$  MCQ (Multiple Choice Questions)

- 1. In ecological succession sere is a -
  - (a) Intermediate developmental phase
  - (b) Primary developmental phase
  - (c) Secondary developmental phase
  - (d) None of the above
- 2. Any biotic factor that acts to limit a population is-
  - (a) variable

- (b) Experiment
- (c) Reproductive Potential
- (d) Limiting factors

3.	The population of two or more than two species occupying the sa		
	habitat at the same time is called -		
	(a) Interaction	(b) Ecosystem	
	(c) Community	(d) Competition	
4.	Kanger Ghati National Park found in which state -		
	(a) Chhattisgarh	(b) Orrisa	
	(c) Madhya Pradesh	(d) Kerala	
5.	Two layer of fur is found in -		
	(a) Polar bears	(b) Parrot	
	(c) Dog	(d) All of the above	
6.	Bioluminescence is found in -		
	(a) Deep Sea fish	(b) Fire fly	
	(c) a and b both	(d) None of the above	
7.	Warm blooded animals are -		
	(a) Ectotherm	(b) Endotherm	
	(c) Exotherm	(d) None of the above	
8.	Osmoregulatory organ is -		

(b) Heart

(c) Brain

**SECTION 'B'**  $4 \times 6 = 24$ 

**Short Answer Type Questions (Word limit 200-250 words.)** 

**UNIT-I** 

**Q. 1.** Explain carbon cycle.

OR

Describe components of ecosystem.

**UNIT-II** 

**Q. 2.** Write characteristics of community.

OR

Explain J shaped growth curve.

**UNIT-III** 

**Q. 3.** Write the adaptive characters of cave environment.

OR

Describe Parasitic habitats.

**UNIT-IV** 

Q.4. What are the differences between stress tolerance and stress resistance.

OR

What is osmoregulation? Explain in brief the stress physiology of osmoregulation in aquous habitat.

(d) Kidney

(a) Liver