

G-4/442/21

Roll No.

M.Sc. IV Semester Examination, 2021**ZOOLOGY****Paper II****(Ecology and Environmental Physiology)**

Time : 3 Hours]

[Max. Marks : 80

Note : All questions are compulsory. Question Paper comprises of 3 sections. Section A is objective type/multiple choice questions with no internal choice. Section B is short answer type with internal choice. Section C is long answer type with internal choice.

SECTION A**1×8=8****(Objective Type Questions)***Choose the correct answer :*

- 1.** The natural residence of every organism is known as :
 (a) Biome (b) Niche
 (c) Habit (d) Habitat
- 2.** Shelford's law of tolerance is named after :
 (a) James Shelford (b) Jacob Shelford
 (c) Williams Shelford
 (d) Ernest Shelford

P.T.O.

3. Bioremediation is :

- (a) Usage of anaerobic bacteria to create antibiotic
- (b) Usage of microbes to create organism
- (c) Usage of aerobic bacteria to create vaccine
- (d) Usage of microbes to demolish environmental pollution

4. Other assessments some to EIA includes :

- (a) SEA-Strategic environmental assessment
- (b) SEA-Strategic impact assesement
- (c) Both A and B
- (d) None of above

5. Which of the following is not a parasitic adaptation :

- (a) Loss of reproductive capacity
- (b) Loss of digestive organs
- (c) Development of adhesive organ
- (d) All of above.

6. In birds, the name of special flight muscles are :

- (a) Pectoralis minor (b) Pectoralis major
- (c) Both A and B (d) None of above

G-4/442/21

[3]

7. The most stressful of all abiotic stressor in animal is :

- (a) Temperature stress (b) Chemical stress
(c) Noise stress (d) All of above.

8. Which part of limbic system is involved in an animals feeling of hunger ?

- (a) Pons (b) Hypothalamus
(c) Hippocampus (d) Thalamus

SECTION B

4×6=24

(Short Answer Type Questions)

Note : Attempt one question from each unit.

Unit-I

1. Briefly describe climatic factors.

Or

Describe the biotic factors.

Unit-II

2. What are natural resources ? Describe the conservation of soil.

Or

Define pollution and describe air pollution and its effect on animals.

G-4/442/21

P.T.O.

[4]

Unit-III

3. Write a note on fresh water adaptation in animals with examples.

Or

Define specific adaptation and explain fight and autotomy.

Unit-IV

4. Discuss the general adaptive syndrome.

Or

Describe in brief the concepts of environmental stress.

SECTION C

12×4=48

(Long Answer Type Questions)

Note : Attempt one question from each unit.

Unit-I

1. Give a detail account of community ecology.

Or

Discuss the aquatic habitat in detail

Unit-II

2. Describe the methods to control different types of pollution.

G-4/442/21

[5]

Or

Discuss in detail environmental impact assessment.

Unit-III

- 3.** Describe the terrestrial adaptation with examples.

Or

Write short note on :

- (a) Cave adaptation,
- (b) Desert adaptation.

Unit-IV

- 4.** Discuss the physiological, behavioural and psychological responding stress concepts.

Or

Describe the physiological response to oxygen deficient stress.

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