

## M.Sc Semester-2 Examination

409

Zoology

April-2024

Time : 2-30 Hours]

[Max. Marks : 70

Q-I

1

Define biomes. Give a brief description of Indian biomes.

2

What is EIA? Describe EIA in detail with its timeline and process.

OR

1

What is meant by succession? Write a note on Hydrarch succession.

2

Write in detail about bioremediation along with the advantages and disadvantages.

(14)

Q-II

1

Provide the correlation between 'r' and 'K' selected species using different factors.

2

What is commensalism? What are the two main types of commensalism? Explain it with proper examples.

OR

1

Competition: What is it? Which are the two primary types of it? Provide relevant examples to explain it.

2

Provide a comprehensive description of the quadrat sampling technique.

(14)

Q-III

1

Explain briefly: Basics of remote sensing.

2

What is active and passive remote sensing? Describe uses of it in detail.

OR

1

Discuss elements of a good map.

2

Give a note on types of aerial cameras.

(14)

Q-IV

1

Describe the types of memory in animals.

2

Define social behavior. Write the types and benefits of social behavior.

OR

1

Write in detail about types and patterns of animal behavior.

2

What is meant by communication? Describe various types of communication observed in animals.

(14)

Q-V

Answer any SEVEN out of TWELVE.

1

Write the steps for solid waste management.

2

Define Carbon footprint.

3

Write the full form of NPP and GPP.

4

The sex ratio varies according to the age profile of the population. According to it, what is the primary sex ratio and what is the tertiary sex ratio?

5

What physical factors affect the size of a bird's clutch?

6

In the first sampling from the Nal Sarovar, 250 *Labeo rohita* were captured and marked. In the second sampling, 300 *Labeo rohita* were caught of which 100 were marked. So, calculate the estimation of the population of *Labeo rohita*.

7

Explain the purpose of ESRI.

8

What is "Geostationary orbit"?

9

Define: Shapefiles

10

Give any two reasons of migration in animals.

11

What is meant by pre-courtship and post- courtship behavior.

12

Name any two tools used to study animal behavior.

(14)

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Max. Marks : 70