

Total Pages-02

RNLKWC/B.Sc.-CBCS/IS/ZOO/H/C2T/22

2022

Zoology

[HONOURS]

(CBCS)

(B.Sc. First Semester End Examination-2022)

PAPER-C2T

Full Marks: 40

Time: 02 Hrs

The figures in the right hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Illustrate the answers wherever necessary

- 1. Answer any five questions of the following: 5x2=10**
- a) What do you mean by heliophytes and Sciophytes?
 - b) Why are 3-5 trophic levels included in food chain?
 - c) "Cavesw as an example of a complete ecosystem" – Justify your answer.
 - d) What do you mean by keystone species?
 - e) What do you mean by ecotone and edge effect?
 - f) Difference between primary and secondary succession.
 - g) What do you mean by population?
 - h) What is life table?

(2)

2. Answer any four questions of the following: 4x5 = 20

- a) Write a short note on "Survivorship curves"
- b) Difference between 'r' and 'K' selected species.
- c) Difference between 'Ex-situ' and 'In-situ' conservation.
- d) What do you mean by fundamental and realized niche?
- e) Write down the difference between a grazing and a detritus food chain with an example.
- f) Difference between commensalism and amensalism with an example.
- g) Prove that - $\frac{dn}{dt} = rN\left(1 - \frac{N}{K}\right)$

3. Answer any one question: 1x10 = 10

- a) Explain briefly the Lotka-Volterra competition model. 10
- b) Write down the relationship between thermodynamics and energy flow in ecosystem. Briefly describe the universal model of energy flow in the ecosystem. 4+6
