

U.G. 1st Semester Examination - 2020**ZOOLOGY****Course Code : BZOOCCHC 102****Course Title : Perspectives in Ecology**

Full Marks : 30

Time : 2 Hours

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*

1. Answer any **ten** of the following: $1 \times 10 = 10$
- What is photokinesis?
 - What does aestivation mean?
 - What is the importance of lithosphere?
 - What do you mean by ecological density of population?
 - What sort of survivorship curve will you find in adult birds?
 - What is biotic potential?
 - Write Lotka-Volterra equation for two species 'a' and 'b'.
 - What do you mean by flagship species?

- Give an example of proto-cooperation.
- What is Gause's principle?
- Where will you find inverted pyramid?
- What is carrying capacity?
- What is seral community?
- Write the chief difference between the Exponential and Logistic growth of population.
- Write the difference between Autecology and Synecology.

2. Answer any **five** from the following: $2 \times 5 = 10$
- Write different means of dispersal.
 - Distinguish between parasite and predator.
 - Explain briefly about Shannon-Wiener Index.
 - Differentiate between autogenic and allogenic succession.
 - What are the objectives of ex-situ conservation?
 - What is Edge effect?
 - Write the differences between r and k strategical populations.
 - Write about Fertility vs. Fecundity.

3. Answer any **two** from the following: $5 \times 2 = 10$
- a) Give an account of Leibig's law of minimum and Shelford's law of tolerance. 5
 - b) What is Red list? What are the various Red list categories? What do you mean by custodial and manipulative management?
 - c) What is the chief difference between grazing and detritus food Chain? Describe the detritus food Chain. $1 + 4 = 5$
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