

M.Sc. (Zoology) Third Semester Old  
**MSC12-4 / ZOO-12 - Special Group-Environmental Biology-II Adaptations,  
Population Dynamics, and Animal Behaviour Paper-XII**

P. Pages : 1

Time : Three Hours



**GUG/W/18/2326**

Max. Marks : 80

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- Notes :
1. All questions are compulsory.
  2. All questions carry equal marks.
  3. Illustrate your answer with suitable figures.

1. Describe the adaptations of animals with reference to temperature and light. 16

**OR**

Write notes on-

- a) Thermoregulation.
- b) Bioluminescence.

2. Give an account of Biological rhythms. 16

**OR**

Write notes on-

- a) Influence of surface tension and salinity on organism.
- b) Protective Colouration.

3. Describe the pattern of population distribution and population growth and density relationship. 16

**OR**

Write notes on-

- a) Mutualism.
- b) Prey and Predator relationship.

4. Give an account of Innate behavior. 16

**OR**

Write notes on-

- a) Genetic aspects of behavior.
- b) Aggregations.

5. Attempt the following- 16

- a) Osmoregulation.
- b) Batesian mimicry
- c) Barriers of dispersal
- d) Advantages of social behavior

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