

4/ZOO-251(Th) Syllabus-2023

2026

(May-June)

FYUP : 4th Semester Examination

ZOOLOGY

**(Aquatic Biology, Wildlife Biology
and Conservation Biology)**

(ZOO-251)

(Theory)

Marks : 56

Time : 3 hours

*The figures in the margin indicate full marks
for the questions.*

**Answer Question No. 1 which is compulsory and
any four from the rest.**

**1. Answer/Write notes on any four of the
following : 3×4=12**

- (a) Briefly explain the layers of a thermally stratified lake.**
- (b) Animal corridors and their role in conservation**
- (c) Estuarine biota**
- (d) Biodiversity hotspots in India**

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(Turn Over)

- (e) Fauna of lotic habitat
- (f) Evaluate the impact of tides in a marine ecosystem.
2. What is meant by physicochemical characteristics of water? Describe in detail the physicochemical characteristics of freshwater ecosystems (light and oxygen) and their role in maintaining aquatic life. $1+8+2=11$
3. Discuss the classification of ponds. Give diagrams, where necessary. $9+2=11$
4. What is an estuary? With the help of diagrams classify estuaries based on their formation. $1+2+8=11$
5. What is the purpose of the IUCN Red Data Book? Elaborate the IUCN Red List categories with examples. $2+9=11$
6. Describe in detail *in situ* and *ex situ* conservation methods with suitable examples. Mention the objectives of wildlife conservation. $5+5+1=11$
7. Discuss the vertical stratification of the marine environment with reference to light and temperature. How do these factors influence the distribution of marine environment? $8+3=11$

8. Answer/Write short notes on any *two* of the following : (May-June) $5\frac{1}{2} \times 2 = 11$

- (a) Briefly explain the river continuum concept.
- (b) Plankton, neuston, nekton, periphyton/ aufwuchs and benthos of lentic ecosystem
- (c) Causes of wildlife depletion
- (d) State major objectives of the National Wildlife Action Plan 2017-2031.

Marks : 36

hours

The figures in the margin indicate full marks for the questions.

Answer Question No. 1 which is compulsory and any four from the rest.

1. Answer/Write notes on any *four* of the following : $3 \times 4 = 12$

- (a) Briefly explain the layers of a vertically stratified lake.
- (b) Animal corridors and their role in conservation.
- (c) Endangered flora.
- (d) Biodiversity hotspots in India.