

**M.Sc. 2nd Semester Examination, 2025**

**ZOOLOGY**

**PAPER — ZOO-204(A & B)(CBCS)**

*Full Marks : 50*

*Time : 2 hours*

**Answer all questions**

*The figures in the right hand margin indicate marks*

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

**ZOO-204A**

*( Wildlife and Eco-Management )*

**GROUP — A**

**1. Answer any two questions from the following :**

**2 × 2**

**(a) Mention the criteria to designate an animal as Wildlife.**

*( Turn Over )*

- (b) Enlist the names of different species under Deer family found in India.
- (c) Name two endangered avifauna of India, mentioning their habitats.
- (d) Discuss the impact of invasive species on wildlife with example.

GROUP – B

2. Answer any *two* questions from the following :

4 × 2

- (a) Represent global biodiversity as proportionate number of major plant and animal taxa. Why should we conserve Biodiversity-state major reasons ?  
2 + 2
- (b) What is the difference between primary and secondary pollution ? What are the different factors contributing to Environmental Pollution ?  
2 + 2

- (c) Suggest the different measures to prevent illegal Wildlife Trade.
- (d) Enumerate the attributes of National park and Sanctuary as per guideline of the Indian Wildlife Protection Act 1972 and their role in the conservation of wildlife.

GROUP – C

3. Answer any *one* question from the following :

8 × 1

- (a) What is the significance of mass nesting (Arribada) in Olive Ridley Turtles ? Mention two reasons for the drastic decline in vulture populations in India. Briefly discuss the conservation measures for Indian Vultures.

3 + 2 + 3

(b) Write short notes on (any *four*) :

2 × 4

- (i) Significance of IUCN Redlist

- (ii) **Habitat fragmentation as a cause of biodiversity loss.**
- (iii) **Environmental Impact Assessment (EIA)**
- (iv) **Ecological Succession and its significance**
- (v) **Zero Population Growth (ZPG) with example**
- (vi) **Ecological consequences of Eutrophication**
- (vii) **Pugmark census and its significance**
- (viii) **Participatory Rural Appraisal (PRA) and its use in wildlife studies.**

( 5 )

**ZOO-204B**

( *Aquaculture* )

**GROUP – A**

**4. Answer any *two* questions : 2 × 2**

(a) Mention criteria for the selection of a suitable site for fresh water pond construction.

(b) What is meant by live fish food ? Give two examples. 1 + 1

(c) Draw the relationship of DO with water temperature in pond ecosystem.

(d) State the current fish production in India and West Bengal.

**GROUP – B**

**5. Answer any two questions : 4 × 2**

(a) Write down the scope of aquaculture in West Bengal.

(b) Mention the biological and ecological attributes for the selection of a cultivable finfish.

(c) Give the brief concept of integrated fish farming, highlighting its advantages and disadvantages.

(d) Describe the advantages and limitations of cage culture fish farming.

**GROUP – C**

**6. Answer any one question : 8 × 1**

(a) What is meant by sustainable aquaculture ?

Write briefly the impact of climate change on aquaculture.

2 + 6

(b) What are seaweeds ? Mention two commercial uses of seaweeds. Add a note on management practices to maintain water quality of an aquaculture farm.

1 + 2 + 5

**[ Internal Assessment — 10 Marks ]**

