

Total Pages—6 PG/IIIS/ZOO/204.1 & 204.2/25  
(2023-24)(CBCS)

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

**ZOOLOGY**

**PAPER — ZOO-204.1 & 204.2(2023-24)(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 — 204.1**

*( 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 consequence of Eutrophication**
- (vii) **Pugmark census and its significance**
- (viii) **Participatory Rural Appraisal (PRA) and its use in wildlife studies.**

**ZOO — 204.2**

**( Aquaculture )**

GROUP – A

1. Answer any *two* questions : 2 × 2
- (a) Mention criteria for the selection of 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

2. 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.

- (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

3. 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 ]

---