

M.Sc. 2nd Semester Examination, 2023

ZOOLOGY

PAPER — ZOO-204.1 & 204.2 (CBCS)

Full Marks : 40

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*

PAPER — ZOO 204.1

(Wildlife and Eco-Management)

1. Answer any two of the following questions : 2×2
- (a) What are criteria for designating a place as to be a 'Biodiversity Hot-spot' ?
 - (b) Mention the difference between Formal Text Book Knowledge and Traditional Knowledge.

(c) Differentiate between eco-degradation from pollution.

(d) What is Sustainable Environmental Management ?

2. Answer any *two* of the following questions : 4×2

(a) What is Biosphere Reserve ? Mention the difference between National Park and Sanctuary. $2 + 2$

(b) What is bio-monitoring ? Give example. $3 + 1$

(c) Add a note on Human-Elephant conflict in South West Bengal.

(d) Enlist different wild-fauna in South West Bengal, India.

3. Answer *one* question from the following : 8×1

(a) What is wild life ? What beneficial roles do they play towards environmental sustenance ? Briefly discuss on the diversity of animals under Deer Family in India. $2 + 2 + 4$

- (b) Define biodiversity. Briefly discuss different beneficial roles of biodiversity. Add a note on the IUCN threatened categories of Wild Fauna.

2 + 3 + 3

PAPER – ZOO 204.2

(*Aquaculture*)

4. Answer any *two* of the following questions : 2×2
- (a) Differentiate between aquaculture and fishery.
 - (b) Mention the names of two cultivable fish species of freshwater.
 - (c) Write the names of two live fish foods found in your local aquatic body.
 - (d) Name the two cultivable shell fishes of West Bengal.
5. Answer any *two* of the following questions : 4×2
- (a) Write down the characteristic features of a cultivable fish species.
 - (b) Write down the prospects of cage culture in India.

(c) Mention the steps of nursery pond management in fish culture practices in West Bengal.

(d) Why soil and water quality characteristics are considered important in fish culture system ?

6. Answer *one* question of the following : 8 × 1

(a) Briefly describe the impact of climate change on aquaculture. 8

(b) (i) Suggest possible solutions for overcoming underutilisation of wetland ecosystems for aquaculture development in West Bengal, India. 5

(ii) Enlist few commonly used live food organisms for pisciculture. 3
