PG (CBCS) M.SC. Semester- III Examination, 2023 ZOOLOGY

PAPER: ZOO 303B

(BIODIVERSITY AND CONSERVATION ECOLOGY AND AQUATIC ECOLOGY)
Full Marks: 40
Time: 2 Hours

The figures in the right-hand margin indicate full marks.

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

Write the answer for each unit in separate sheet

UNIT: ZOO 303B.1

BIODIVERSITY AND CONSERVATION ECOLOGY

GROUP-A

1. Answer any **TWO** of the following questions:

 $2 \times 2 = 4$

- a) State the criteria of a hotspot.
- b) State the principles and goals of CBD.
- c) What is red Data Book?
- d) Define Biospere reserve.

GROUP-B

2. Answer any **TWO** of the following questions:

 $2 \times 4 = 8$

- a) Write a note on national Park.
- b) Enumerate the UNESCO Heritage Sites in India.
- c) Discuss the levels of biodiversity.
- d) Write a note on man-elephant conflict.

GROUP-C

3. Answer any **ONE** of the following questions:

 $1\times8=8$

- a) What is ex situ conservation? Give an account of tiger conservation in West Bengal? 2+6
- b) What is social forestry? Discuss Arabari Concept in execution of forest management? 2+6

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UNIT ZOO 302.2

AQUATIC ECOLOGY

GROUP-A

4. A	nswer	anv	TWO	of the	following	questions
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 $2\times2=4$

- a) What do you mean by Ramsar Site?
- b) What is ox-bow lake?
- c) What is bioremediation?
- d) What is neritic zone in ocean?

GROUP-B

5. Answer any **TWO** of the following questions:

 $2 \times 4 = 8$

- a) Write a note on distribution of salinity in sea.
- b) Discuss about River Action Plan in waste water management.
- Discuss the unique features of mangrove ecosystems, focusing on the Sundarbans in India.
- d) Comment on the circulation of nutrients in the coastal zone.

GROUP-C

6. Answer any **ONE** of the following questions:

 $1 \times 8 = 8$

- a) Elaborate the major anthropogenic threats to coral ecosystems. Why wetlands are called "the kidney of nature"? 6+2
- b) Write notes on any two:

4+4

- i. Factors contributing to the degradation of water quality.
- ii. Biota of estuarine ecosystem
- iii. Oyster Reef
- iv. Zooxanthellae