PG CBCS M.SC. Semester- III Examination, 2021 ZOOLOGY

PAPER: ZOO 303B (SPL PAPER)

(BIODIVERSITY AND CONSERVATION ECOLOGY & AQUATIC ECOLOGY)

Full Marks: 40 Time: 2 Hours

Write the answer for each unit in separate sheet

UNIT: ZOO 303B.1

(Biodiversity and Conservation Ecology)

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

2X10=20

- 1. What do you mean by biodiversity hotspots? State the criteria to be considered to designate an area as biodiversity hotspot. Add a note on CBD. 2+3+5
- 2. Define in-situ and ex-situ conservations. Discuss the merits and demerits of ex-situ conservation. 2+2+6
- 3. Write explanatory notes on
 - (a) Wildlife crime
 - (b) Social forestry 5+5
- 4. Discuss the possible impact of climate change on bio ecology of Amphibia. 10
- 5. Write the full form of GIS and GPS. Discuss the role of DNA finger printing in wildlife forensics.

 2+2+6

UNIT: ZOO 303B.2

(Aquatic Ecology)

Answer any <u>TWO</u> questions of the following:

2X10=20

- 1. Describe the use of off-stream water sources for industrial and domestic uses. Comment on the human induced problems of coastal ecosystems.

 5+5
- 2. Distinguish between red and black mangroves citing examples. Discuss the importance of wetlands. What is an atoll reef? 3+5+2
- 3. What is the function of coral reef in shoreline protection? Distinguish between creek, fen, bog and swamp. Comment on the impacts of human activities on river ecosystems.

2+4+4

- 4. Define fluvial process. Explain the horizontal and vertical zonation of sea. Define Integrated coastal zone management. Comment on the salt tolerating adaptation in mangrove plants. 1+4+2+3
- 5. a) Represent the profile of continental margin.
 - b) Mention the criteria of a water body to be designated as a 'wetland'. What is Ramsar's convention? 4+(3+3)