

UNIVERSITY OF RUHUNA

BACHELOR OF SCIENCE SPECIAL DEGREE LEVEL I (SEMESTER I)

EXAMINATION 2020 – APRIL/MAY 2021

SUBJECT : Zoology

Time : 01½ hours

COURSE UNIT : ZOO 4083 – Ornithology

Answer **Question number 1** and **two other** questions only.

Illegible handwriting would be penalized.

1. Answer **any three** of the following.
 - (i). Briefly describe the molecular biological technique/s used in avian systematic studies.
 - (ii). What is meant by the term “ecomorphology”?
Applying the knowledge on ecomorphology of birds, carry out an Ecological survey of the major groups of birds in the world.
 - (iii). What are the major benefits of avian nests and mention in brief the reproductive behaviour patterns involved in nest building and nest defence of birds?
 - (iv). Write a concise account on major groups of frugivorous birds in the world.
 - (v). Write a brief note on the structure and function of the bird’s eye, that provides perfect sense of vision in birds.

(50 minutes)

(50 marks)

2. (i). Briefly explain why the management & conservation of birds has become vital in the present day ecological context.
- (ii). Review the methods used for endangered bird species management.

(20 minutes)

(25 marks)

3. "Birds play a valuable role in nearly everyone's day to day life". Justify this statement emphasizing the **ecological services rendered** and evaluating the **esthetical and recreational values of birds**.

(20 minutes)

(25 marks)

4. Name the different organ systems involved in contributing to the efficient avian propulsion system, and briefly discuss the important features of those organ systems towards the creation of this efficient and perfect flying machine.

(20 minutes)

(25 marks)

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