



**RAJARATA UNIVERSITY OF SRI LANKA
FACULTY OF APPLIED SCIENCES**

**B.Sc. in Applied Sciences
Third Year – Semester II Examination – July 2020**

BDC 3204-WILDLIFE CONSERVATION AND MANAGEMENT

Time: Two (02) hours

Answer FOUR (04) questions.

1. a) What do you mean by the term “wildlife control”? (20 marks)
 b) Mention the **three (03)** methods of wildlife control. (20 marks)
 c) Briefly explain one of above mentioned methods using suitable examples. (60marks)

2. a) Define the term ‘Maximum Sustainable Yield’. (30 marks)
 b) Give a brief account on **three (03)** types of wildlife harvesting methods. (70 marks)

3. Compare and contrast the following.
 a) Transects and Quadrates in wildlife censusing
 b) Fundamental niche and Realized niche
 c) Pre-saturation dispersal and Saturation dispersal
 d) Manipulative management and custodial management
 (25×4 marks)

4. a) Briefly explain the diversity of digestive patterns of herbivores. (70 marks)
 c) How do you control a wildlife population by manipulating food and habitat? (30 marks)

5. a) A wildlife Scientist tracked the births, deaths and reproduction of Darwin’s finches on the island Daphne Major in the Galapagos. She constructed a life table to illustrate the pattern of mortality with age of the finch population. By using the data given below, fill in the rest of the life table.

Age (years) (x)	Survival frequency (f_x)	Survivorship (l_x)	Mortality (d_x)	Mortality rate (q_x)
0	82			
1	42			
2	25			
3	17			
4	14			
5	14			
6	13			
7	13			
8	13			
9	7			
10	4			
11	4			
12	4			
13	2			
14	2			
15	1			
16	0			

(60 marks)

b) Based on your calculations, comment on the survivorship pattern in these finches.

(20 marks)

c) Briefly explain the two basic direct estimation methods of life table parameters.

(20 marks)

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