

UNIVERSITY OF RUHUNA

BACHELOR OF SCIENCE GENERAL DEGREE LEVEL I (SEMESTER II)

EXAMINATION – JANUARY/FEBRUARY 2018

Subject : Zoology

Course Unit : ZOO 1212 - Chordate Organization and Diversity

Time: 01½ hours

Index No :

Answer the **Part A** and **any two** questions from **Part B**.

Illegible handwriting would be penalized.

Question No.	Marks
Part A	1
	2
	3
	4
Part B	5
	6
	7
	8
Assessment	
Total	

Part A : Answer all. (40 minutes)

1. (i). Mention **two** main morphological characteristics that favored the successful life style of Placoderm fishes.

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(ii). State **two** advance features shown by Acanthodii fishes over Placoderm fishes.

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(iii). Name the jaw suspension method that can be seen among early Placoderm fishes and state specific feature of it.

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(iv). State **two** adaptations shown by parasitic adult lampreys for their successful mode of life.

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(10 marks)

2. (i). Mention **four** functions of amphibian skin.

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(ii). Why coloration is important to amphibians?
Mention **three** coloration types found in amphibians.

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(iii). Mention **three** direct nursing (parental care) strategies recorded in order Anura with examples.

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(iv). Mention **three** methods of respiration observed in amphibians.

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(10 marks)

3. (i). Differentiate the following traditional divisions at least giving **two** reasons.

(a). Agnatha from Gnathostomata

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(b). Anamniota from Amniota

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(c). Protochordates from Vertebrates

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(ii). Give **three** characteristic features of Class Reptilia that contributed to the successful conquest of land.

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(iii). State the common names of **three** turtles that visit the coastal beaches of Sri Lanka and **three** land tortoises present in Sri Lanka.

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(iv). Briefly explain how non-venomous snakes kill their prey.

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(10 marks)

4. (i). Give a brief description of *Archaeopteryx*.

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(ii). Name the different types of flight seen among birds, giving **one** example each showing the flight type mentioned.

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(iii). Explain the **two** basic means/mechanisms that produce the bird colouration.

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(iv). Mention the **two** theories that have been put forward to explain the origin of bird flight.

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(10 marks)

Part B : Answer **any two** questions only.

5. Write a concise report on 'Lung fishes'.

(25 minutes)

(20 marks)

6. Write an essay on estivation and hibernation of amphibians.

(25 minutes)

(20 marks)

7. Explain why the anapsid reptile living on earth today are considered as a unique group of vertebrates.

(25 minutes)

(20 marks)

8. Summarize the important features of bird organization that have contributed to its successful aerial mode of life.

(25 minutes)

(20 marks)

 **For the assessment**

(20 marks)

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REPEAT EXAMINATION - JANUARY/FEBRUARY 2018

SUBJECT : Zoology

Time: 01½ hours

COURSE UNIT : ZOO 1212 - Chordate Organization and Diversity

Answer **any three (03)** questions only.

Illegible handwriting would be penalized.

1. Write a concise account on the "swim bladder of fishes".

2. Briefly describe the "Parental care" seen in amphibians.

3. Briefly mention the morphological and locomotory diversity shown by modern reptile groups.

4. Describe the weight reducing and power promoting adaptations in birds.

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සාමාන්‍ය විද්‍යාවේදී උපාධි ප්‍රථම ස්ථල (දෙවන සමාසික) පුනර් පරීක්ෂණය
ජනවාරි/පෙබරවාරි 2018

විෂයය : සත්ත්ව විද්‍යාව

කාලය : පැය 01½ යි

පාඨමාලා විකඛය : ZOO 1212 - පෘෂ්ඨවංශි සංවිධානය සහ විවිධත්වය

ඕනෑම ප්‍රශ්න තුනකට (03) පමණක් පිළිතුරු සපයන්න.

අපැහැදිලි අත්අකුරු පිළිබඳ වගකීම ගිණයා සතුය.

1. මත්ස්‍යයින්ගේ “ජලවන ආගය” (swim bladder) යන මෑයෙන් සංකෘෂ්ඨ වාර්තාවක් ලියන්න.

2. ඇමිබියාවන්ගේ දක්නට ලැබෙන “මව්පිය රැකවරණය” (parental care) කෙටියෙන් විස්තර කරන්න.

3. නූතන රෙප්ටිලියා ඩාණ්ඩ පෙන්නුම් කරන රූපිය සහ සංවර්ත විවිධත්වය කෙටියෙන් සඳහන් කරන්න.

4. පක්ෂීන්ගේ ඩර අඩු කර ගැනීම සහ ඩල ශක්තිය වැඩි කර ගැනීම සඳහා ඇති අනුවර්තන විස්තර කරන්න.

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