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FACULTY OF MEDICINE, UNIVERSITY OF RUHUNA
B.Sc. Medical Laboratory Science Degree Programme
Year End Examination-Year 3

6th Batch – Animal Research- SEQ

Date: 24th July 2017

MLS - 3202
Time: 10.00 a.m.-11.00a.m.

Duration: 1 hour

Answer all questions

Index Number:

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1.0 1.1 State **four** factors that should be considered when selecting an anesthetic agent for experiments involving laboratory animals. **(Marks 20)**

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1.2 State **three** characteristics of an ideal anaesthetic agent used in animal experiments. **(Marks 15)**

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1.3 Briefly explain the significance of a humane end point in an animal experiment. **(Marks 20)**

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1.4 State **two** methods of euthanasia on animals.

(Marks 10)

1.5 Comment on the ethical considerations of the methods stated in 1.4.

(Marks 15)

1.6 State **four** tools/parameters used in the assessment of behavior of animals in experiments.

(Marks 20)

2.0 2.1 State the difference between the strain and breed.

(Marks 10)

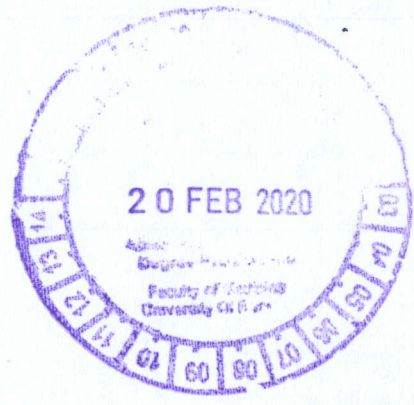


2.2 Briefly explain what a mutation is, giving examples for clearly visible abnormalities due to mutations. **(Marks 25)**

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2.3 State one advantage of a mutant strain. **(Marks 10)**

2.4 What are transgenic mice? **(Marks 15)**



2.5 What is estrus cycle?

(Marks 20)

2.6 Write **one** difference between animals and humans during their respective estrus and menstrual cycles?

(Marks 20)

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