


KISII UNIVERSITY
UNIVERSITY EXAMINATIONS

SECOND YEAR EXAMINATION FOR THE AWARD OF THE
DEGREE OF BACHELOR OF SCIENCE IN MEDICAL LABORATORY
SCIENCE
SECOND SEMESTER 2017/2018
(MAY - AUGUST, 2017)

MELS 274: LABORATORY EXPERIMENTAL ANIMAL SCIENCE

STREAM: Y2S2

TIME: 3 HOURS

DAY: THURSDAY, 9:00-12:00 PM

DATE: 24/08/2017

INSTRUCTIONS

1. *Do not write anything on this question Paper.*
2. *Answer ALL questions in Section A, question one is compulsory and any other question in Section B.*

SECTION A: ANSWER ALL THE QUESTIONS [40 MARKS]

1. Giving examples differentiate between a rat mouse and a guinea pig. [5 marks]
2. Explain how to maintain a germ free laboratory animal. [5 marks]
3. Give a detailed account of euthanasia. [5 marks]
4. Describe briefly the nomenclature used for laboratory mice. [5 marks]
5. Explain why it is important that laboratory animals are handled with care during experiments. [5 marks]
6. Explain how to prevent diseases in experimental laboratory animals. [5 marks]
7. Describe the diet of mice, guinea pig and rabbit. [5 marks]

8. How do you prepare an experimental laboratory animal for intravenous drug administration? [8 marks]
9. Describe maceration as used in extraction. [4 marks]
10. What should you consider when you are doing a study on crude drugs. [4 marks]

SECTION B: ANSWER THE QUESTION ONE (COMPULSORY) AND ANY OTHER QUESTIONS [30 MARKS]

1. Describe the methods of drug administration for experimental animals [15 marks]
2. Discuss in detail available breeding systems for experimental animals [15 marks]
3. Discuss the signs of an healthy animal and give the symptoms of diseased animals. [15 marks]