



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF MEDICAL SCIENCES

UNIVERSITY EXAMINATION FOR:

MSC

5113: MOLECULAR PARASITOLOGY

END OF SEMESTER EXAMINATION

SERIES: APRIL 2016

TIME: 2 HOURS

DATE: 16 Apr 2016

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **FIVE** Question(s). Attempt any **THREE** questions.

Do not write on the question paper.

Question ONE Describe the pathogenesis of African Trypanomiasis

Question TWO) a) Discuss the differences in pathology between the Rhodesian disease and the Gambian disease?

- b) What is the first symptom of infection with African trypanosomes?
- c) Why is it important to treat the disease prior to entry of the parasites into the CNS?
- d) Which type of trypanosomiasis would be difficult to diagnose early enough?
- d) Explain the phenomenon winterbottoms sign

Question THREE Explain the following terms as used in molecular parasitology

- a) Okazaki fragment
- b) Primer
- c) RNA
- d) mRNA
- e) tRNA

Question FOUR Discuss protein synthesis with emphasis on

- a) Replication
- b) Transcription
- c) Translation
- d) Splicing

Question FIVE)

- a) What are house keeping genes
- b) What are introns and what are their functions in protein synthesis
- c) What are proteomics
- d) What is the function of metabolomics