



MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

P.O. Box 972-60200 – Meru-Kenya.

Tel: 020-2069349, 061-2309217. 064-30320 Cell phone: +254 712524293, +254 789151411

Fax: 064-30321

Website: www.must.ac.ke Email: info@mucst.ac.ke

University Examinations 2012/2013

SECOND YEAR, SECOND SEMESTER EXAMINATION FOR DIPLOMA IN AGRICULTURE

BIO 0211: MICROBIOLOGY AND ZOOLOGY

DATE: AUGUST 2013

TIME: 1 ½ HOURS

INSTRUCTIONS: Answer *section A* and any one question in *section B* and *section C*

SECTION A

QUESTION ONE (30 MARKS)

- a) Briefly describe the distinguishing characteristics of viruses. (4 Marks)
- b) Differentiate between the following: (6 Marks)
 - i. Nucleocapsid and capsomeres
 - ii. Septate and aseptate hypha
 - iii. Nucleoid and plasmid
- c) Differentiate between a gram positive and gram negative bacteria. (4 Marks)
- d) Describe the 2 body forms found in cnidarians. (4 Marks)
- e) Differentiate between the following: (4 Marks)
 - i. Radial and bilateral symmetry
 - ii. Schizocoelus and entero coelous coelom
- f) List and briefly describe the various defensive behaviour found in animals. (4 Marks)
- g) Briefly describe some of the branches of zoology. (4 Marks)

SECTION B (answer any one question)

QUESTION TWO (15 MARKS)

Describe the lytic and lysogenic reproductive cycles in bacteriophage.

QUESTION THREE (15 MARKS)

- a) Describe in detail the structure of bacterial cell. (10 Marks)

- b) Write short notes on morphology of fungi. (5 Marks)

SECTION C (Answer any one question)

QUESTION FOUR (15 MARKS)

- a) Describe the various behaviour patterns exhibited by animals. (10 Marks)
- b) Describe the structure of a typical sponge. (5 Marks)

QUESTION FIVE (15 MARKS)

- a) The phylum chordate is distinguished by some hallmarks. Describe any five of them. (10 Marks)
- b) Write short notes on class mammalia. (5 Marks)