



MERU UNIVERSITY COLLEGE OF SCIENCE & TECHNOLOGY

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University Examinations 2012/2013

SECOND YEAR, SECOND SEMESTER EXAMINATION FOR DIPLOMA IN AGRICULTURE

BIO 0211: MICROBIOLOGY AND ZOOLOGY

DATE: DECEMBER 2012

TIME: 1 ½ HOURS

INSTRUCTIONS: Answer question **ONE** and any other **TWO** questions

QUESTION ONE – 30 MARKS

- (a) (i) Briefly discuss how the Protozoans are adapted to their environment (2Marks)
(ii) Below is a table showing the phyla in protozoa and some of their characteristics. Fill in the missing information. (6Marks)

Phylum	Common Name	Lomocotion	Representative Genera
	Sarcodines		
		Cilia	
		Flagella	
	Sporozoans	None	Toxoplasma

- (b) Briefly discuss the economic importance of sponges. (2Marks)
(c) (i) Name the 3 classes in phylum platyhelminthesis. (3Marks)
(ii) Discuss morphological adaptations of platyhelminthesis to parasitic mode of life. (3Marks)
(d) Draw a fully labelled structure of a bacteria cell. (4Marks)
(e) Describe the general characteristics of protozoa. (2Marks)
(f) Outline 4 characteristics of fungi. (4Marks)
(g) Distinguish between gram-positive and gram-negative bacteria. (2Marks)

QUESTION TWO – 15 MARKS

Discuss the economic importance of bacteria. (15Marks)

QUESTION THREE – 15 MARKS

Discuss the adaptations of birds to flight. (15Marks)

QUESTION FOUR – 15 MARKS

Discuss why arthropods are successful. (15Marks)

QUESTION FIVE – 15 MARKS

Discuss the general characteristics of viruses. (5Marks)

Draw a fully-labelled structure of a bacteriophage. (10Marks)