

**MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY**

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**University Examinations 2015/2016**

SECOND YEAR, SECOND SEMESTER EXAMINATION FOR DIPLOMA IN AGRICULTURE

**BIO 0211: MICROBIOLOGY & ZOOLOGY**

**DATE: NOVEMBER, 2015 TIME:** $1½ $**HOURS**

**INSTRUCTIONS:** *Answer question* ***one COMPULSORY*** *and any other* ***two*** *questions.*

**QUESTION ONE – (30 MARKS)**

1. Outline four characteristics of fungi. (4 Marks)
2. List the four Koch’s postulates . (4 Marks)
3. Explain the contribution of Anton-van-leuwenhoek to microbiology. (3 Marks)
4. Name three basic characteristics that distinguish the phylum chordata. (3 Marks)
5. Draw a fully labeled structure of the bacterial cell. (5 Marks)
6. Differentiate the two forms of bacteria on the basis of cell wall. (4 Marks)
7. Differentiate between radial and bilateral symmetry. (3 Marks)
8. List and briefly describe the various defensive behaviour found in animals. (4 Marks)

**QUESTION TWO (15 MARKS)**

Discus the main characteristics of fish that enable locomotion to occur. (15 Marks)

**QUESTION THREE (15 MARKS)**

1. Describe the various adaptations seen in tapeworms. (5Marks)
2. Discuss the economic importance of microorganisms. (10 Marks)

**QUESTION FOUR (15 MARKS)**

1. Write short notes on class mammalia. (5 Marks)
2. Discuss the general characteristics of viruses. (5 Marks)
3. Give five differences between prokaryotes and eukaryotes. (5 Marks)