



W1-2-60-1-6

JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY
UNIVERSITY EXAMINATIONS 2019/2020

**EXAMINATION FOR THE DEGREE OF MASTER OF SCIENCE IN MEDICAL
MICROBIOLOGY**

TMM 3102: ANAEROBIC MICROBIOLOGY

DATE: FEBRUARY, 2020

TIME: 3 HOURS

INSTRUCTIONS: ANSWER ANY FOUR QUESTIONS

1.
 - a. Describe five infections associated with peptostreptococci. (15 marks)
 - b. Explain the major predisposing conditions for the infection with peptostreptococci. (10 marks)
2. Describe the detail the main pathogenesis of an organism that fulfills the following criteria: colonizes the genital tract of sexually active adults and is uncommon in prepubertal children. (25 marks)
3. Explain:-
 - i. Anaerobic bacterial culture and the purpose why it is performed. (10 marks)
 - ii. Describe the precautions the health provider must take while obtaining the sample diagnosis and aftercare in case of vein puncture. (15 marks)
4.
 - a. Describe the cell structure and metabolism of Fusobacterium. (10 marks)
 - b. Explain its clinical implications in human infection. (7 marks)
 - c. Define the term "Lemierre syndrome" and its progression stages. (8 marks)
5. Discuss Propionibacterium as follows:-
 - a. Cell structure and metabolism. (5 marks)
 - b. Explain briefly three categories of lesions and infections associated with Propionibacterium. (10 marks)
 - c. Treatment and control measures. (10 marks)

ANSWER THIS QUESTION AS FOLLOWS:-

6. a. Name six species of porphyromonas. (6 marks)
- b. Describe the microbiological and biochemical properties of porphyromonas. (5 marks)
- c. Explain the four forms of actinomycosis in human. (8 marks)
- d. Describe the identification and isolation of veillonella. (6 marks)