

BACHELOR OF MEDICAL LABORATORY SCIENCES HONOURS
MDU4302- DIAGNOSTIC BACTERIOLOGY
FINAL EXAMINATION

DURATION: THREE HOURS

DATE: 07/05/2021

TIME: 9.30 AM – 12.30 PM

Part B: Structured Essay Questions (40 marks)

Q1

A 25 year old female presented to the sexually transmitted infection control clinic with a vaginal discharge.

1.1 What is the ideal specimen to be collected for laboratory diagnosis of gonococcal vulvo-vaginitis? **(1 mark)**

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1.2 How do you transport the specimen mentioned in 1.1 for microbiological investigations? **(2 marks)**

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1.3 List the steps in the processing of the above-mentioned specimen (1.1) in the Microbiology laboratory? **(5 marks)**

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Q2

A 26-year-old woman developed abdominal bloating, intestinal gurgling and nausea. She was having profuse watery diarrhea occurring hourly. The causative agent was identified as *Vibrio cholerae*.

2.1 What is the mechanism of transmission of *Vibrio cholerae*? **(1 mark)**

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2.2 What is the correct specimen for bacteriological investigation? **(1 mark)**

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2.3 Briefly explain the method of specimen collection. **(2 marks)**

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2.4 How do you transport and store the above-collected specimen if the processing is delayed? **(2 marks)**

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2.5 List **one (01)** primary media and **one (01)** enrichment medium used for inoculation of above collected specimen. **(2 marks)**

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2.6 What is the reagent used for the string test? **(2 marks)**

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Total – 10 marks

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Total - 10 marks

Q4

4.1 Classify antibiotics based on the mechanism of action on bacterial cells? **(2.5 marks)**

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4.2 List **two (02)** bactericidal and **two (02)** bacteriostatic antimicrobial agents. **(2 marks)**

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