

UNIVERSITY OF JAFFNA, SRI LANKA
FACULTY OF ALLIED HEALTH SCIENCES
THIRD YEAR SECOND SEMESTER EXAMINATION IN BScHons (MLS) – 2021
MLSDM 3243 DIAGNOSTIC MICROBIOLOGY



Date: 16.10.2023

Time: 2 hours

ANSWER ALL FOUR QUESTIONS.

1. A pus swab taken from a patient with diabetic wound ulcer was received for microbiological culture and ABST.
 - 1.1 Name two primary bacterial pathogens that can be isolated from this specimen. (10 marks)
 - 1.2 Name three bacteria which could be considered as pathogens when pure growth is seen on culture of this specimen. (10 marks)
 - 1.3 Describe how to process the above sample in a clinical microbiology laboratory. (20 marks)
 - 1.4 Describe how to identify the pathogens mentioned in 1.1 in a clinical microbiology laboratory. (40 marks)
 - 1.5. Briefly describe the reporting procedure of the given sample. (20 marks)

2. A cerebrospinal fluid sample from a five-month-old child is received for microbiological diagnosis.
 - 2.1 Name three most possible bacteria which can be isolated from this specimen. (10 marks)
 - 2.2 Briefly describe how you would process the above sample in a clinical microbiology laboratory. (35 marks)
 - 2.3 Describe how to identify the bacterial pathogens mentioned in 2.1. (55 marks)

3. A blood sample of a 60- year- old male suspected to have typhoid fever inoculated into a blood culture bottle, was received for bacterial culture.
 - 3.1 Mention the details you would check when receiving blood for culture. (10 marks)
 - 3.2 Briefly describe how to process the blood received in the culture bottle in a clinical microbiology laboratory. (40marks)
 - 3.3 Name the bacteria which cause typhoid fever (05 marks)
 - 3.4 Describe how you would identify the bacteria you mentioned in 3.3 in a clinical microbiology laboratory. (45 marks)

4. Write short notes on
 - 4.1 KIA (30 marks)
 - 4.2 Analytical profile index (API) (40 marks)
 - 4.3 CAMP test (30 marks)