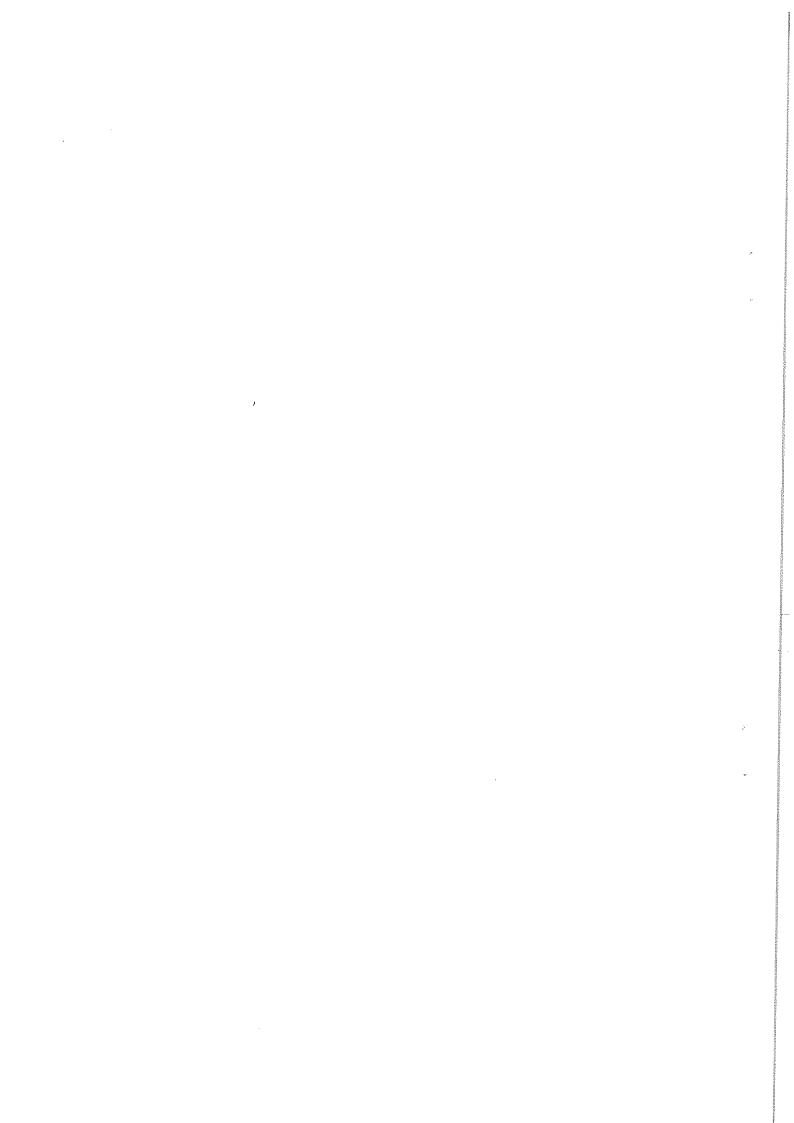
BACHELOR OF MEDICAL LABORATORY SCIENCES HONOURS MDU4302- DIAGNOSTIC BACTERIOLOGY FINAL EXAMINATION DATE: 30TH SEPTEMBER 2022 TIME: 9.30 AM – 12.30 PM

Part B: Structured Essay Questions (40 marks)

Q1	
A 65-year-old male presented with fever for 1 week and cough with blood	-stained sputum. He was
uspected of having pulmonary tuberculosis.	
1.1 List the features of an ideal specimen container to be used for collection	
diagnosis of above infection?	(1 mark)
	,
1.2 Write the principle of acid-fast staining.	(3 marks)
t	
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	,
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
1.3 Outline the features of Mycobacterium tuberculosis in acid-fast stain.	(2 marks)
· · · · · · · · · · · · · · · · · · ·	
· · · · · · · · · · · · · · · · · · ·	•
	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,



•	
.4 Briefly describe the isolation and identification of Mycobacterium tuber	rculosis from the sput
specimen.	(4 marks)
·····	
(°	Total – 10 marks)
Q2	
A 29-year-old man presented with intermittent epigastric discomfort, wit gastrointestinal bleeding. He reported no use of aspirin or non-steroidal adrugs (NSAIDs). A serologic test for <i>Helicobacter pylori</i> was positive and day course of triple therapy (omeprazole, amoxicillin and clarithromyciweeks later he returned with the same symptoms.	nti-inflammatory he received a 10-
2.1 Name one (01) disease caused by Helicobacter pylori?	(1 mark)
2.2 What is the specimen to be collected for bacteriological diagnosis condition?	s of above disease (1 mark)
·	

mentioned in 2.2.	(5 marks

4 The therapy given against <i>Helicobacter pylori</i> had not been say	
4 The therapy given against <i>Helicobacter pylori</i> had not been sue the infection. State the main reason.	ccessful for eradication o
4 The therapy given against <i>Helicobacter pylori</i> had not been such the infection. State the main reason.	ccessful for eradication o
4 The therapy given against <i>Helicobacter pylori</i> had not been sue the infection. State the main reason.	occessful for eradication o
4 The therapy given against <i>Helicobacter pylori</i> had not been suct the infection. State the main reason.	ocessful for eradication o
The therapy given against <i>Helicobacter pylori</i> had not been such the infection. State the main reason.	ccessful for eradication o (1 mark)
4 The therapy given against <i>Helicobacter pylori</i> had not been suct the infection. State the main reason.	ccessful for eradication o (1 mark)
The therapy given against <i>Helicobacter pylori</i> had not been such the infection. State the main reason.	ccessful for eradication o (1 mark)
The therapy given against <i>Helicobacter pylori</i> had not been such the infection. State the main reason.	ccessful for eradication o
The therapy given against <i>Helicobacter pylori</i> had not been such the infection. State the main reason.	ccessful for eradication o (1 mark)
The therapy given against <i>Helicobacter pylori</i> had not been such the infection. State the main reason.	ccessful for eradication o
The therapy given against <i>Helicobacter pylori</i> had not been such the infection. State the main reason.	ccessful for eradication of (1 mark)
The therapy given against <i>Helicobacter pylori</i> had not been such the infection. State the main reason.	ccessful for eradication o
The therapy given against <i>Helicobacter pylori</i> had not been such the infection. State the main reason.	ccessful for eradication o

	fildex No	
Q 3		
Dip	htheria is a highly contagious disease spreaded by droplets or direct physica	contact.
3.1	Name the causative agent of diphtheria.	(1 mark)
3.2	Briefly describe the pathogenesis of diphtheria.	(3 marks)
		,,
	<u></u>	•••••
3,3	Give the main virulence factor of the causative agent mentioned in 3.1.	(1 mark)
3.4	Briefly explain a laboratory test to detect the virulence factor mentioned in	3.3.
		(5 marks)
	<u></u>	
	<u></u>	

	· · · · · · · · · · · · · · · · · · ·	
		• • • • • • • • • • • • • • • • • • • •
		·
		• • • • • • • • • • • • • • • • • • • •
		• • • • • • • • • • • • • • • • • • • •

	(Total	- 10 marks)
Q۷	4	
4.1	Define the term "Minimum inhibitory concentration (MIC)" of an antibiotic.	(1 mark)
	·	
	-	
	·	
		••••••
1.2	List three (03) methods available to detect MIC.	(3 marks)
	i	
	ji	********
	iii	
.3	State the disk diffusion methods of antibiotic sensitivity tests (ABST) available	è in Sri
	Lanka.	(1 mark)
		,

	index 110	
Briefly explain the quality com	trol procedure in the "reporting" of th	
you stated in 4.3.		(5 marks)

~~~		
		- ••••••
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
	••••••	
***************************************		(Total – 10 Marks)
		(10tai - 10 mai ks)
art C: Essay Questions (30 ma	arks) .	
• -		
1. Describe the laboratory	tests available to detect extended s	spectrum β lactamase (ESB
production in Escherichic		(15 marks)
production in 25000000000000000000000000000000000000		
2 A 22 weer old man preser	nted with discrete, nontender, superfi	cial ulcers on the penis. He w
	rimary syphilis. Discuss how wo	
		(15 marks)
investigations of primary	sypuins in this man.	(15 matro)
ملت مات جان وان وان وان وان ران ران	**********	****
*******		• • •
	Copyrights reserved	