

First Midterm Exam
Academic Year 1446-Hijri- First Semester

Exam Date (Hijri): ٢٢/ربيع الأول/١٤٤٦	Course Code: 463 MBI
Exam Date (Gregorian): ٢٠٢٤/٠٩/٢٥	Course Name: Antibiotics
Exam Time: 1 - 3 PM	

Student's Name		اسم الطالب
ID number		الرقم الجامعي
Section No. 4569	٤٥٦٩	رقم الشعبة
Classroom No. 1 B 11 B. 5	١١ م ٥	رقم قاعة الاختبار
Instructor Name Prof. Dr. Naiyf S Alharbi	أ.د. نايف بن سلطان الحري	اسم أستاذ المقرر
Serial Number		الرقم التسلسلي

Instructions:

- 1- Your Exam consists of 1 PAGES and 1 ANSWER SHEET.
- 2- Keep your mobile and smart watch out of the classroom

This section is ONLY for instructor

#	Course Learning Outcome	Question (s) covered	Points	Actual Point
1. Knowledge	CLO 1-1: Initial concepts of antibiotics	Q1 (2A,2B) Q2 (2,4, 6,7,8,9,10) Q3 (1,3)	1+1+0.5+0.5+0.5+0.5+0.5+0.5+0.5+0.5	6.5
	CLO 1-2: Comprehension of extracting and measuring the rate of reaction of antibiotics and antibiotic biosynthesis	Q3 (4)	0.5	0.5
	CLO 1-3: How to use antibiotic treatment and methods of use in the prevention	Q1 (1) Q2 (1,3)	1+0.5+0.5	2
	CLO 1-4: Learn how to detect the activity of antibiotics	Q3 (2)	0.5	0.5
2. Cognitive Skills	CLO 2-1: Discuss where antibiotics come from.	Q2 (5)	0.5	0.5
	CLO 2-2: Discuss the causes of the development of antibiotic resistance	-	-	0
	CLO 2-3: How to use antibiotics in the treatment and side effects.	-	-	0

**FINAL
Score**

10

Q1: Mention and discuss as required: (3 Marks)

1- Explain the importance of Selective Toxicity in antibiotics? (1 Mark)

2- Define the following terms:
A- Disinfectants: (1 Mark)

B- Antibacterial: (1 Mark)

Q2: Put a check (✓) mark if the statement is correct and (✗) mark if incorrect. (5 Marks)

1	All antibiotics are antimicrobials, but not all antimicrobials are antibiotics.	
2	Alexander Fleming was able to purify penicillin for medical use in 1928.	
3	Microbiological Methods These methods are used when a rapid diagnosis is required.	
4	Dysentery can be caused by both bacteria and parasites.	
5	The most important sources of antibiotics are bacteria, actinomycetes and fungi.	
6	The sedimentation coefficient of ribosomal proteins in algae and protozoa is different from that in bacteria.	
7	One of the quality characteristics of antibiotics is that it does not metabolize to toxic intermediates.	
8	Antibiotics are chemicals that can kill or inhibit microbes. They have a high molecular weight and can be swallowed or injected.	
9	Antigen a type of protein called an immunoglobulin that reacts with a specific antigen and acts as part of the body's vital defense mechanism.	
10	Replacement therapy means adding or injecting a harmless microbe to replace another harmful, pathogenic microbe, thus eliminating the harmful via the harmless inside the body.	

Q3: Select the correct answer for the following multiple-choice questions. (2 Marks)

- are antibiotics specialized in killing or inhibiting fungi.
a- Antiseptic b- Antiviral c- Antifungal d- Sanitizer
- The activity of the combined antibiotic group is less than that of the most active antibiotic in the group.
a- Addition b- Antagonism c- Synergism d- Indifference
- are tests that are performed inside the body of a living organism.
a- *In vitro* b- *In vivo* c- Both a and b d- None of the above
- One of the standard methods for determining the effect of antibiotic activity is based on measuring of light extracted .
a- Enzyme Activity b- Nephelometry c- Impedance d- Turbidimetry