



Agric. Biotech. Dept.

Time allow: 2 hr  
Date: Tus-4-6-2024  
Place: Hal No.210  
At: 10 Am-12 Pm  
Total marks:60

Final Exam. of 5<sup>th</sup> level of English Language  
For M.Sc. Degree Students  
2023-2024  
Second Semester  
Prof. Dr. Husain El-Fadaly



**Please answer the following questions**

**The first question:-----(20 marks)**

- A- Write a short essay on each of the following:-----(16 marks)  
Mesosomes – Toxoplasmosis – plasmolysis – Archieobacteria  
– Covid-19 – Botulism – Murein – Brucellosis.
- B- Draw bacterial cell showing its arrangements and the intra-cellular and extra-cellular appendages.--(4 marks)

**The second question:-----(15 marks)**

A- **Translate into English:-----(10 marks)**

تحتوي التربة الزراعية علي أعداد كبيرة جدا من الكائنات الحية الدقيقة التي تستطيع تحليل المواد العضوية النيتروجينية مثل: البروتين والأحماض النووية وغيرها وتنتج  $NH_3$  كمركب أساسي والميكروبات المحللة للبروتين تشمل بكتيريا هوائية واختيارية واكتينوميستات وفطريات والنواتج النهائية لتحليل البروتينات هوانيا هي  $CO_2 - H_2O - H_2S - NH_3$  أما التحلل تحت الظروف اللاهوائية فعادة يكون مصحوبا بروائح كريهة وتسمى عملية التحلل في هذه الحالة تعفن وتكون نواتج التحلل عبارة عن أمونيا وأمينات وأحماض أمينية وأحماض عضوية.

B- **Translate into Arabic:-----(5 marks)**

Flat sour spoilage of canned foods is occurring when the thermophilic bacteria grow but the can is not swollen by gas production, it is called flat sour spoilage which is caused by thermophilic bacteria such as *Bacillus stearothermophilus* which hydrolyze both starch and sugars that are used in food preparation.

**The third question: Write the word which best fits space. -----(10 marks)**

- 1- Absance of bacterial envelope causes ..... colonies while its presence causes..... colonies.
- 2- The cultivation media where bacteria grow is either .....or.....
- 3- Individual cells of bacteria are .....or.....
- 4- Rod-shaped bacterial cells are called .....and its plural is.....
- 5- The spiral -shaped bacteria are called .....and its plural is.....
- 6- Most bacteria is .....and it can multiply by.....
- 7- Other forms of bacteria are .....or.....
- 8- The bacteriophage is either .....or.....

**The fourth question: write the following sentences are true or false. -----(5 marks)**

- 1- Bacteria are surrounded by a viscous layer are called capsule ( )
- 2- Flagellum is composed of only two parts, basal body and hook ( )
- 3- Stalk bacteria have a semisolid stalk ( )
- 4- Myxobacteria are fast-moving bacteria that they have movement parts ( )
- 5- Nuclear region are associated with bacterial cytoplasmic membrane ( )

**The fifth question : Choose the correct answer -----(10 marks)**

- 1- G+ Bacteria (decrease fat content - increase fat content- increase CHO)
- 2- Many amino acids exist to the basic structure of the bacterial cell wall such as (cysteine acid – glutamic acid – Tyrosin – lysine).
- 3- Ribosomes are composed of ( lysozyme – Teichoic acid – Rhibonucleoprotein)
- 4- Bacterial cell wall gives the cell shape which is (flexible- mocoid- hard )
- 5- Cytoplasm is a liquid water content ranging from ( 70-80- 10- 80-90%-40-50%)
- 6- Episomes are parts of (DNA- RNA- pilli- capsule)
- 7- Among the compenents of the protoplast (capsule-cytoplasm-flagella)
- 8- All parts located inside the cell wall is known as (cytoplasm-capsule- protoplast)
- 9- Responsible for antibiotic resistance in bacteria( plasmid -Episomes- ribosomes)
- 10- Animal phage and plant phage are similar in ( shape-nucleic acid- structure)

With Best Wishes,  
Prof. Dr. Husain El-Fadaly

