

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

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كلية العلوم

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*سجدة*  
Tartous University ,  
Faculty of Science ,  
Department of Math,  
Second Year English Language Exam ,  
Second Term 2024-2025 ,  
Thursday , August 20 ,2025 / 9-11 A.M.

**Choose the correct answer , A ,B or C of the following items .**

- 1-A number is a mathematical .... which is used in counting , calculating  
and quantifying . A- material B- tool C-substance
- 2-Decimal number system consists of 10 digits ,from ..... . A- 1 to 10 B-1 to 9  
C- 0 to 9
- 3-A Binary Number is made up of only ..... and 1s . A-2 s B- 4 s C- 0 s
- 4- Numbers from 0 to 9 are known as .... numerals . A- Arabic B- Indian C-English
- 5-The number of digits involved in a number system is called the....of that number  
system . A- origin B- beginning C- base
- 6-A number system formed by only two digits 0,1 is called ..... system . A-decimal  
B- binary C-fractional
- 7-Counting numbers are also called ..... numbers . A- whole B- original C- natural
- 8-Any number can be formed with the help of .....digits. A- two B- nine C-ten
- 9-If a number system involves 8 digits , it is called .... number system .  
A- octal B- heptad C- hexagonal
- 10-Binary system is very important because it is used in .... types of computers .  
A- some B- a few C-all
- 11-Computer stores information in the form of ..... . A- 10 B- 9 C- 0 and 1
- 12-The process ( $1 + 2 = 3$ ) is called ..... . A- adhesion B-addition C- Adjustment
- 13-The process ( $1 - 2 = -1$ ) is called ..... . A-fraction B- production C-subtraction
- 14- .... signifies repeated addition . A- Succession B- Multiplication C- Multiform
- 15-.... is a reversal of multiplication . A- Division B- Repetition C-Reversion
- 16-A given number called divisor is contained in another given number called ..... .  
A-dividing B- divided C- dividend
- 17-Set of natural number is denoted by ..... . A- M B- N C- U
- 18- There are no numbers with .... in natural numbers .  
A-decimals B-constants C-infinities
- 19-Natural numbers are the set of..... integers . A- negative B- rooted C- positive
- 20-The sum of two natural numbers is always a ..... number .  
A-compound B- natural C-complex
- 21-The ..... of two natural numbers is also natural number . A-process B-theory  
C- product

- 22-When a natural number is subtracted from another natural number , the result is ..... a natural number . A-always B-not always C-certainly
- 23-Addition of whole numbers ..... gives a whole number . A- not always B-always C-sometimes
- 24-Whole numbers are ..... under addition : A-closed B-open C-free
- 25-Whole number is denoted by ..... . A- N B- H C- W
- 26-Whole numbers are ..... under subtraction . A-closed B-not closed C-open
- 27-Multiplication of whole numbers..... gives a whole number . A- sometimes B- not always C-always
- 28-Set of integers is denoted by : A- M B- Y C- Z
- 29-Positive integers are the set of natural numbers including ..... .  
A-one B-zero C-nine
- 30-They do not have any fractional or .... part . A- fractile B- fragment C-decimal
- 31-To distinguish between the positive and negative ..... of 0 , opposite signs are used . A-lines B-sides C-sheets
- 32-Zero is the only whole number which is not a ..... number .  
A-complex B-compound C-natural
- 33-Zero is ..... by 0 . A-composed B-represented C-formed
- 34-Zero is the only ..... between natural and whole numbers .  
A-coincidence B-similarity C-difference
- 35-Zero ..... to any number , gives the number itself . A-gone B-added C-taken
- 36-Zero is the additive ..... for all numbers . A-function B-element C-identity
- 37-Zero multiplied by any number, ..... gives zero . A-sometimes B-not always C-always
- 38-Any number divided by zero is not ..... . A-defined B-definite C-decreased
- 39-Natural numbers can further be sub-divided into .... types . A-similar  
B-different C-opposite
- 40-..... divided by any number ( except zero ) , gives zero . A-One B-Null C-Zero
- 41-Binary system is not used in everyday ..... apparently . A-life B-process  
C-research
- 42-The number of multiplicands considered for addition is ..... . A-multiplication  
B-multiplicative C-multiplier
- 43-An ..... number is any number that can be divided by 2 . A-odd B-octal C-even
- 44-A number is divisible by 2 if its ..... digit is 0, 2, 4, 6 etc . A-first B-last C-second
- 45-An ..... number is any number that cannot be divided by 2 . A-odd B-even  
C-absolute
- 46-A Prime Number can be... evenly , only by 1 or itself. A-added B-subtracted  
C-divided
- 47- If we list the... of 28 , we have 1,2,4,7,14 and 28. A-processes B-factors C-digits
- 48-If we list the factor of 29, we only have 1 and ..... . A- 28 B-30 C- 29
- 49-Prime numbers have exactly ..... factors . A-six B-two C-five
- 50-When a number has more than two factors , it is called .... number .  
A-composite B-ordinal C-cardinal

Good Luck

Instructor  
M.S.R.

The first question: Answer two of the following three questions (No more than four lines) /20 marks/ اختياري

1- Classify the genus homo. /10 marks/

the family hominidae, /2 درجة/

the order primates, /2 درجة/

the class mammalia, /2 درجة/

the phylum chordata, /2 درجة/

the kingdom animalia, /2 درجة/

the domain eukarya.

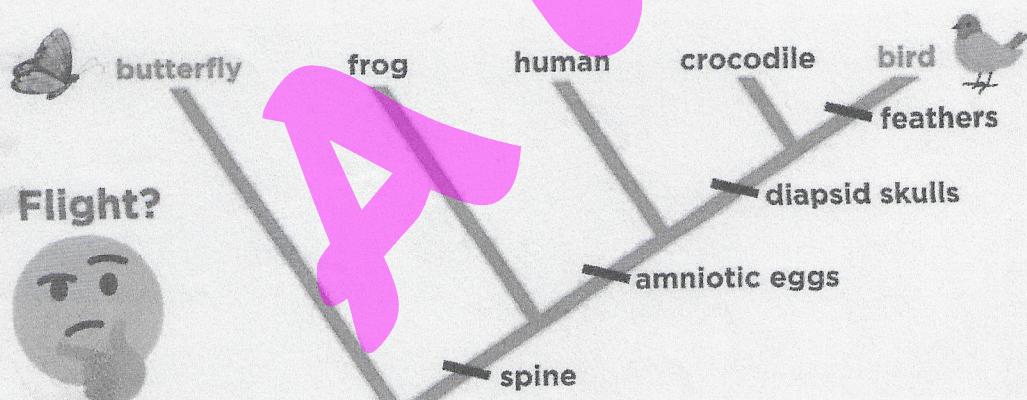
2- what are the organelles within a eukaryotic cell? List them and talk about one of them. /10 marks/

Nucleus – Mitochondria - Endoplasmic Reticulum (ER) - Golgi Apparatus

Lysosomes – Ribosomes - Chloroplasts (in plant cells) – Vacuoles -Cytoskeleton.

/ يكفي تعداد خمس م特عيّنات كل واحدة درجة ، ولشرح واحدة منهم ٥ درجات/

3- Please build a cladogram for these five organisms: butterflies, frogs, humans, crocodiles, and birds. /10 marks/



/ درجة لترتيب كل كائن في ضمن المخطط التفرعي التصنيفي ودرجة لكل صفة مضافة + درجة لشكل المخطط/

\* قبل كتابة المخطط التفرعي سبّل جدول او كتابة كعادر

ملاحظة: الجدول ي العمل على كاعل العلامات  
العمر اذ الم تغير احياناً المذكرة  
بالسؤال يغير الدرجات درجات / بعضها

The second question: What is the scientific term that matches the following definitions? / ٤ درجة لكل مصطلح / 20 marks /

- 1- DNA.
- 2- Centrosome.
- 3- The tree of life.
- 4- Cladograms.
- 5- The plasma membrane.

The third question: Choose the most accurate answer among the four suggested options / ٤ درجة لكل مصطلح / 20 marks /

- 1- b. Prokaryotic Cell wall.
- 2- c. Mitochondria.
- 3- a. Gram-positive bacteria.
- 4- a. Archaea
- 5- d. The cytoplasm.

The fourth question: Determine if the following statements are true or false / 20 marks / درجتين لكل كلمة صحيحة أو خطأ في موقعها الصحيح /

- |            |           |           |            |
|------------|-----------|-----------|------------|
| 1. True.   | 2. False. | 3. True.  |            |
| 4. False . | 5. False. | 6. False. |            |
| 7. True.   | 8. True.  | 9. True . | 10. False. |

The fifth question: Choose a scientific topic discussed in the course. Write down the question and its answer. (No more than five lines) / 20 marks /

/ ٤ درجات لطرح سؤال منطقي و ٦ درجة للإجابة عليه /

Dr. Maissoun Ziadeh

**The first question: Answer two of the following three questions (No more than four lines)**

/20 marks/

- 1- Talk about the Stanley Miller and Harold Urey experiment.
- 2- Talk about the Endosymbiotic Theory.
- 3- Classify the genus homo.

**The second question: What is the scientific term that matches the following definitions?**

/ 20 marks/

1. ....is the molecule of life.
2. .... complex macromolecules made of RNA and proteins.
3. .... consists of a series of stacks, and there is a cis face, usually facing the ER, where vesicles arrive, and a trans face, where vesicles leave.
4. .... has many branches, where different species evolved from a common ancestor.
5. ....are moments during or in between phases throughout the cell cycle.

**The third question: Choose the most accurate answer among the four suggested options**

/ 20 marks/

1. Rigid structure, made of peptidoglycan, creates a mesh-like layer around the cell
  - a. Eukaryotic Cell wall.
  - b. Prokaryotic Cell wall.
  - c. Cell wall for all organisms.
  - d. All previous answers (a,b,c) are false.
- 2- It is a sac containing an environment that is much more acidic than the rest of the cell, and it holds enzymes that digest large molecules via hydrolysis.
  - a. The lysosome.
  - b. The Golgi apparatus.
  - c. Mitochondria.
  - d. The smooth ER.
3. It is a kingdom within the domain eukarya
  - a. Reptilia.
  - b. Amphibia.
  - c. Mammalia.
  - d. Plantae.

4. Each animal listed on a cladogram is more closely related to the animal
- a. on its right.
  - b. on its left.
  - c. Above it.
  - d. All previous answers (a,b,c) are false.

5. When the genome gets copied or synthesis
- a. The G1 phase.
  - b. The G2 phase.
  - c. The interphase.
  - d. The S phase.

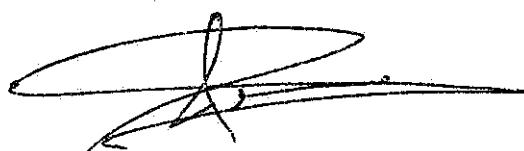
**The fourth question: Determine if the following statements are true or false / 20 marks/**

- 1. there's a hypothesis that proposes that the first organic compounds were transported to the earth from space, This is called the panspermia hypothesis.
- 2. Gram-positive bacteria have cell walls with lots of peptidoglycan, so they do not retain the stain very well, so they show up with more of a pink color.
- 3. The rough endoplasmic reticulum's surface is studded with ribosomes, giving it a rough appearance.
- 4. Centrosome can be found only in animal cells.
- 5. Crocodiles, snakes and lizards are reptiles.
- 6. The position of animals which listed on a certain cladogram refer to their evolution.
- 7. Humans have 46 chromosomes in all somatic cells.
- 8. Cancer involves cells that are dividing out of control, which leads to the development of a tumor.
- 9. Prokaryotic cells have their genetic information inside a nucleus.
- 10. Mitochondria can digest damaged organelles.

**The fifth question: Choose a scientific topic discussed in the course. Write down the question and its answer. (No more than five lines) / 20 marks/**

Wishing you the best of luck      12/2/2025

Lecturer: Dr. Maisoun Ziadeh



The first question: Answer two of the following three questions (No more than four lines) /20 marks/ اختياري

1- Stanley Miller and Harold Urey experiment: /10 marks/ 2.5 درجة لكل جملة

- a- They set up a system that mimics conditions early in earth's history.
- b- they placed water, ammonia, methane, and hydrogen.

c- it was exposed to heat as well as an electric current, (lightning).

d- After about a week, they found a number of different amino acids, which are the building blocks of proteins.

2- Endosymbiotic Theory: /10 marks/ 2.5 درجة لكل جملة

a- Some species of bacteria acquired unique functions, like the ability to perform photosynthesis, or breathe oxygen.

b- larger host cells enveloped some of them.

c- instead of digesting them, a mutual dependency arose.

d- The smaller cell received protection, while the larger one take energy.

3- We humans belong to the genus homo. /10 marks/

the family hominidae, /2 درجة

the order primates, /2 درجة

the class mammalia, /2 درجة

the phylum chordata, /2 درجة

the kingdom animalia, /2 درجة

the domain eukarya, /2 درجة

The second question: What is the scientific term that matches the following definitions? / 20 marks/ 4 درجة لكل مصطلح

1- DNA.

2- Ribosomes.

**The first question: Answer two of the following three questions (No more than four lines) /20 marks/ اختياري**

**1- Stanley Miller and Harold Urey experiment: /10 marks/ 2.5/ درجة لكل جملة**

- a- They set up a system that mimics conditions early in earth's history.
- b- they placed water, ammonia, methane, and hydrogen.
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the kingdom animalia, /2 درجة

the domain eukarya, /2 درجة

**The second question: What is the scientific term that matches the following definitions? / 20 marks/ 4 درجة لكل مصطلح**

- 1- DNA.
- 2- Ribosomes.

- 3- The Golgi apparatus.
- 4- The tree of life.
- 5- The Checkpoints.

**The third question:** Choose the most accurate answer among the four suggested options / 20 marks/ 4 درجة لكل مصطلح /

- 1- b. Prokaryotic Cell wall.
- 2- a. The lysosome.
- 3- d. Plantae.
- 4- a. on its right.
- 5- d. The S phase.

**The fourth question:** Determine if the following statements are true or false / 20 marks/ درجتين لكل كلمة صحيحة أو خطأ في موقعها الصحيح /

- |            |           |           |
|------------|-----------|-----------|
| 1. True.   | 2. False. | 3. True.  |
| 4. True.   | 5. True.  | 6. False. |
| 7. True.   | 8. True.  | 9. False. |
| 10. False. |           |           |

**The fifth question:** Choose a scientific topic discussed in the course. Write down the question and its answer. (No more than five lines) / 20 marks/ 4 درجات لطرح سؤال منطقي و 16 درجة للإجابة عليه /

**Dr. Maissoun Ziadeh**