



Question One:

(10 marks)

Chose the appropriate answer from the listed choice of each statement:

- 1- The origin of lysosomes is:
 - a- Nucleus
 - b- Golgi apparatus.
 - c- Smooth endoplasmic reticulum
 - d- Granular endoplasmic reticulum

- 2- During the cell division the phase follows the G2 is known as:
 - a- G1
 - b- M
 - c- S
 - d- G2

- 3- The chromosomes of a eukaryotic cell are located in the:
 - a- Nucleus
 - b- Mitochondria
 - c- Ribosome
 - d- Endoplasm

- 4- The blood group which has no antibodies is:
 - a- **O⁺**
 - b- **AB⁺**
 - c- O⁻
 - d- **AB⁻**

- 5- The smallest formed elements of blood are the:
 - a- W.B.CS
 - b- R.B.CS
 - c- Platelets
 - d- Fibrin

- 6- The electron transport chain occurs in the:
 - a- Cytosol
 - b- Mitochondrial matrix
 - c- Cytoplasm
 - d- The inner membrane of the mitochondria

- 7- A person whose blood group is "O" can receive blood from:
 - a- Group "AB" only
 - b- Group "O" only
 - c- Group "A" and Group "B"
 - d- All of the above



- 8- Water is _____ percentage of the total volume of plasma:
a) 55%
b) 45%
c) 60%
d) 90%
- 9- Person belongs to Type (A) blood has the A antigen is present:
a) on the surface of white blood cells
b) on the surface of red blood cells
c) on the surface of platelets
d) within the red blood cells
- 10- Life span of platelets in the blood is about:
a) several weeks
b) several years
c) (9-10) days
d) (120) Days

Question Two:

(10 marks)

Put a mark (√) or (×) in front of the following sentences:

- 1- () Fungi are examples for prokaryotic cells
2- () Epiglottis prevents foreign material from entering the voice box.
3- () Binary fission is kind of sexual reproduction.
4- () The tissues are grouped to form the cell
5- () Catabolism is the building up of new living materials.
6- () Nucleotides are the monomer of the nucleic acids.
7- () Proteins are 'commonly known as the tissue –builders
8- () Cytology deals with the function of body organs.
9- () Chloroplasts are found in the plant and the animal cells.
10- () Stationary ribosomes are free in cytoplasm.



Question Three: (15 marks)

Answer the following Questions:

A) What is the other name of leucocytes? What is the function of these cells?

B) We can divide cellular respiration into three metabolic processes:

- 1) _____
- 2) _____
- 3) _____

Match the description below with the organelle or cell component on the right:

1.	Deals with the transmission of hereditary characters		Centriole
2.	Regulate the passage materials and substances		Golgi apparatus
3.	All body cells accept the reproductive cells.		Meiosis
4.	Aids in cell division		Lysosomes
5.	Make modifications on proteins in the cell.		Nuclear pores
6.	A protein that bind oxygen.		Somatic cells
7.	Play important role in elongation of cell life		Facilitated diffusion
8.	A type of cellular reproduction reduces the number of chromosomes to half.		Haemoglobin
9.	Kind of transportation which need carriers without need energy.		Genetics
10.			Mitosis



Question Four: (10 marks)

A) Define:

Zoology:

Osmosis:

Eukaryotic cells:

A) Describe the function of:

Cell membrane:

Chloroplast:



Question Five:

(7 marks)

A) There are two types of immunity:

- 1) _____
2) _____

B) Complete the chart:

	Mitosis	Meiosis
Number of Daughter Cells produced		
Type of Reproduction		
Number of Divisions		
Function		
Chromosome Number		



Question Six:

(8 marks)

A) Write a scientific term for each of the following sentences:

- 1- _____ the monomer units of carbohydrates.
- 2- _____ endoplasmic reticulum which have ribosomes on it.
- 3- _____ the process of oxidizing food molecules.
- 4- _____ when one allele is completely dominant over the other allele.
- 5- _____ means the addition of new substances to the living material of the body.

B) A man with blood group (BB) has married a woman with blood group (O) ...according to a genetic basis, what are the chances of blood groups of their children.



Question Seven : **(10 marks)**

Note: “Only for the students who are not attended the midterm exam”:

(خاص بالطلبة الذين لم يتقدموا لامتحان النصف فقط)

A)) Where can ribosomes are found in the cell?? What is the function of ribosomes??

B) Talk briefly about:

- a. Glycolysis
- b. Anabolism
- c. Active Transport
- d. Phagocytotic vessels
