



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- G3

3- The unfertilized egg in human female has:

- a- 46 chromosome
- b- 44 chromosome
- c- 22 chromosome
- d- 23 chromosome

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 erythrocytes in the blood is about:**
a) several weeks
b) several years
c) (9-10) days
d) (100-120) ay

Question Two:

(10 marks)

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

- 1- () Epiglottis prevents foreign material from entering the voice box.
2- () Binary fission is kind of sexual reproduction.
3- () The adult human has about FIVE liters of blood inside of his body
4- () Catabolism is the building up of new living materials.
5- () Amino acids are the monomer of the nucleic acids.
6- () Proteins are 'commonly known as the tissue –builders
7- () Histology deals with the function of body organs.
8- () RNA is a double helix structure made up of nucleotides.
9- () Stationary ribosomes are free in cytoplasm.
10- () The antigens and antibodies of the blood are located on the plasma



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.	One of many units of heredity information located on the chromosomes		Centriole
2.	Regulate the passage materials and substances		Golgi apparatus
3.	All body cells except 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.		Genes
			Mitosis



Question Four: (10 marks)

A) Define:

Immunology:

Genotype:

Complete Dominance:

A) Describe the function of:

Chloroplast:

Mucous membrane:



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		
Chromosomes Number		

