

Biology**Time: 3 hours**

(الإجابة في نفس كراسة الأسئلة)

(الدور الأول ٢٠٢٢)

الأحياء بالإنجليزية

الأسئلة في تسع صفحات**The first group: from 1 to 9****1- Choose one of the two questions (a) or (b), then mention the scientific term that indicates it.**

- (a) Cells secrete a fluid that nourishes the sperm inside the testes.
-

- (b) Nutritive tissue surrounding the embryo sac of the flower.
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2- Choose one of the two questions (a) or (b), then correct what is underlined:

- (a) Nucleosomes are small, circular DNA molecules found in prokaryotes such as bacteria
-

- (b) There are only five types of nucleotides get in the structure of DNA.
-

3- Choose one of the two questions (a) or (b), then choose the odd word in the following words:

- (a) Seminal vesicles - prostate gland - Cooper's glands - Graafian follicle.
-

- (b) Corolla - Androecium - Gynoecium – Gametophyte
-

4- Mention the name of the insect that transmits malaria disease to humans.**5- Choose the correct answer from the following:**

The number of ribs in a human beings is

A - 12

B - 16

C - 24

D - 20

6- Put (✓) or (X) for the following statement:

The chemical transmitters are released from the synaptic vesicles by the effect of sodium ions. ()

7- Choose from the statements of column (B) what fits the statements of column (A):

(a)	(b)
1- Helper T cells ()	(a) They are formed in the thymus gland.
2- B cells. ()	(b) They are formed in bone marrow and mature in thymus gland. (c) They are formed and mature in the bone marrow.

8- Mention the name of the hormone whose deficiency causes the following diseases:

First: myxedema.

.....

Second: diabetes mellitus.

.....

9- Give an example for each of the following:

First: A unicellular organism that reproduces by budding.

.....

Second: A green plant that reproduces by spores.

.....

The second group: from 10 to 18**10- Choose one of the two questions (a) or (b), then mention the scientific term that indicates it:**

- (a) Chemical substance that attract phagocytes that are moving with the blood in large numbers towards the site of the presence of microbes.
-

- (b) Immunoproteins which appear in the blood and lymph in the form of a letter Y.
-

11- Choose the odd word in the following words:

Adrenaline – aldosterone – cortisone – interferon

.....

12- Choose the correct answer from the following:

When tired, muscular fatigue is occurred due to the accumulation of

- A- carbon dioxide B- alcohol. C- lactic acid D- amino acids

13- Correct the underlined words.

In flowering plants, male gametes are formed inside antheridia.

.....

14- Choose the odd word in the following words:

Thyroid gland- bone marrow - Peyer's patches - thymus gland

.....

15- Put (✓) or (X) for the following statement:

Plant cell walls acquire hardness if cellulose and lignin are deposited on them. ()

16- Choose one of the two questions (a) or (b), then give one example:

- (a) Nucleic acid acts as genetic material.
-

- (b) A nitrogenous base that binds to guanine in the DNA molecule.
-

17- Give an example of each of the following:

First: An insect that reproduces asexually and gives males.

.....

Second: An insect that reproduces asexually and gives females

.....

18- Give an example for each of the following:

First: A chemical element that enters the structure of the genetic material and distinguishes it from protein

.....

Second: a chemical element that enters the structure of the protein and distinguishes it from the genetic material.

.....

The third group: from 19 to 27**19- Choose one of the two questions (a) or (b), then Correct the underlined words.**

(a) T cells change into phagocytic cells when that needed.

.....

(b) Glucosides are considered as non-protein amino acids.

.....

20 - Choose one of the two questions (a) or (b), then explain the type of asexual reproduction in it:

(a) Planaria worm.

.....

(b) Amoeba.

.....

31- Choose the correct answer from the following:

The continuous increase in the secretion of the thyroid gland in the adult person causes

- A- myxedema. B - bulging inflation. c- idiocy. d- cretinism

32- Give the scientific term that indicates the following statement:

The process of transferring pollen grains from the anther to the stigma of a flower.

.....

33- Choose the odd word in the following words:

Myosin - sarcomere - auxin – actin

.....

34- Choose one of the two questions (a) or (b), then mention the scientific term that indicates it.

(a) The inner floral whorl of a flower and it consists of one or more carpels.

.....

(b) Seedless fruits are produced naturally without pollination or fertilization.

.....

35 - Choose from the column (B) what fits to the column (A):

(A)	(B)
1- Histamine is secreted from ()	a- killer T cells. b- mast cells.
2- Interferon is secreted from ()	c- Virus-infected cells.

36- What is the name of the hormone that causes the following processes:

First: Relaxation of the pubic symphysis at the end of pregnancy.

.....

Second: increase the concentration of calcium in the blood.

.....

Fifth group: from 37 to 45**37- Choose one of the two questions (a) or (b), then correct underlined words:**

(a) The cell is the building unit of DNA.

.....

(b) Lymphokines are proteins secreted by helper T cells after elimination of the microbe.

.....

38- Choose the correct answer from the following:

The system that produces white and red blood cells is the system.

- A- circulatory B- skeletal C- respiratory D- excretory

39- Correct underlined words

Acromegaly is caused due to an increase in the secretion of the gastrin hormone.

.....

40- Give the scientific term that indicates the following statement:

A substance secreted by the ear to kill microbes, thus protecting the ear

.....

41- Choose the correct answer from the following:

The two upper limbs are connected to the human vertebral column by

- A- shoulder B – pelvis. C - humerus D - upper arm

42- Put a (✓) or (X) mark in front of the following statement:

The germ cells have the ability to attack and eliminate virus-infected cells and cancer cells . ()

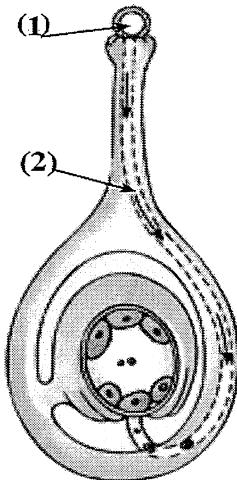
43- study the opposite figure that represents Fertilization process in flowering plants, then answer one of the questions (a) or (b).

(a) The labeled No. (1) represents

.....

(b) The labeled No. (2) represents

.....

**44- Correct underlined words**

First, Ribosomes are strands of DNA wrapped around histones.

.....

Secondly, Deoxyribonuclease enzyme adds nucleotides one by one to end of the new DNA strand.

.....

45- Name the cells that perform the following functions:

First: Cells from which the bud grows in multicellular organisms such as sponges and Hyde.

.....

Second: Cells of the hypothalamus region of the brain secrete hormones from the posterior lobe of the pituitary gland.

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