

نماذج تدريبية للصف الثالث الثانوي الأحياء باللغة الإنجليزية النموذج (6)

2025 - 2026

أولاً : الأسئلة الموضوعية (اختيار من متعدد) "كل سؤال من درجة واحدة"

1

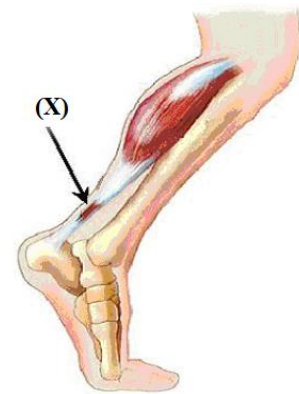
The high concentration of salts within the cells of a plant leaf is due to the absence of:

- A) Cutin
- B) Cellulose
- C) Lignin
- D) Suberin

2

Which of the following is affected by a cut in structure (X)?

- A) The nerve supplying muscle
- B) The gastrocnemius muscle
- C) The heel bones
- D) The blood vessel supplying muscle



3

The pulling movement in peas differs from that in bulbs in:

- A) Protecting the parts exposed to air
- B) Thickening of the plant stem with supporting tissues
- C) The direction of root growth
- D) The structure responsible for the pulling movement

4

Which of the following leads to stop of a skeletal muscle movement during muscle spasm?

- A) Stop the enzymes are responsible ATP production
- B) Actin filament movement is stopped
- C) Increase in the length of the dark zone
- D) Increase in the length of the Z-line distance.

5

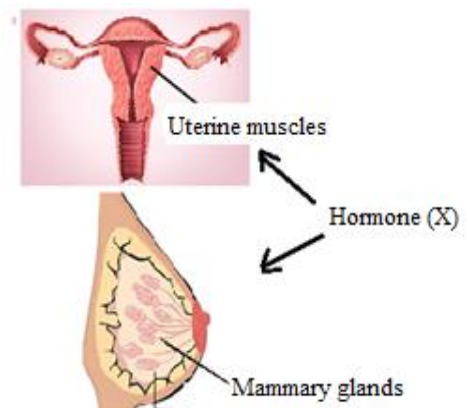
Which of the following hormones did the scientist Starling play a role in pointing to it?

- A) Insulin
- B) Secretin
- C) Thyroxin
- D) Calcitonin

6

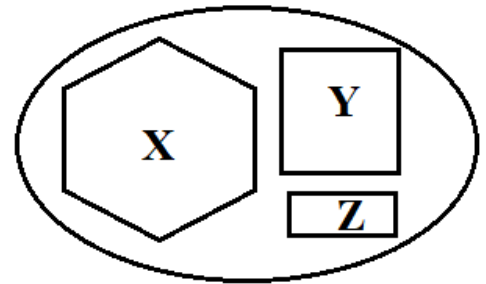
From the diagram, which of the following represents the storage site of hormone X?

- A) The posterior lobe of pituitary gland
- B) The anterior lobe of pituitary gland
- C) Nerve cells in the thalamus
- D) Nerve cells in the hypothalamus



7

The figure illustrates a mixed gland in humans containing different types of cells X-Y-Z.



If cells (X) its secretions are stimulated by two hormones, while the cells are Z and Y are stimulated by the concentration of a substance in the body.

Which of the following is true about this gland?

- A) Secretes hormones by cells (X)
- B) Secretes digestive juice is by cells (X)
- C) secretes enzymes are by cells (Y)
- D) Secretes steroids are by cells (Z)

8

Which of the following explains the importance of reproduction for the continuity of the species not the individual?

- A) It allows the organism to adapt throughout its life.
- B) It enables the transmission of genetic material to future generations.
- C) It provides the energy necessary for metabolic activities.
- D) It increases the size of the organism.

9

Meiosis plays a major role in:

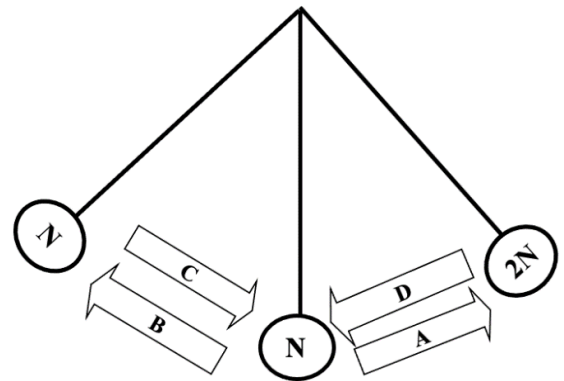
- A) All eggs of the female aphid insect .
- B) merozoites in Plasmodium
- C) zygospore in Spirogyra
- D) Oocyst in Plasmodium

10

The pendulum in front of you represents the life cycle of *Plasmodium malariae* as it moves from one place to another within the primary and intermediate hosts, where the right side represents one host and the left side the other.

During which of the following stages do chill and fever appear?

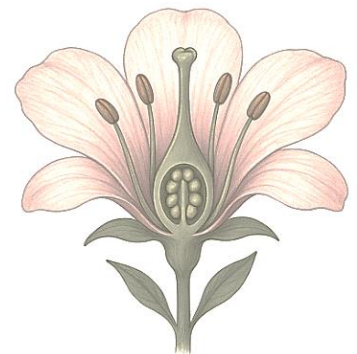
- A) Stage (A)
- B) Stage (B)
- C) Stage (C)
- D) Stage (D)



11

Examine the flower shown in the diagram, then answer.

The difference in the timing of anther and ovary maturation is a functional adaptation in order to:



- A) Preventing the occurrence of pollination between different plant species
- B) Reducing the probability of producing plants with genetic defects
- C) Producing seedless fruits without pollination
- D) Increasing the number of seeds within the fruit

12

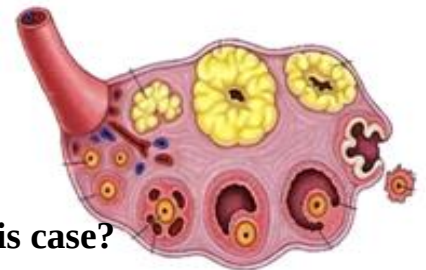
A woman in her fourth month of pregnancy with twins underwent an ultrasound to determine the sex of the fetuses. The doctor informed her that she was carrying two male babies, each of them has his own placenta.

In light of this, determine what cause the twin pregnancy in this woman?

- A) The division of a fertilized ovum by a sperm during its cleavage.
- B) The division of a fertilized ovum by two sperms different in sex chromosomes.
- C) Division of two ova fertilized by two sperms similar in the sex chromosomes.
- D) Division of two ova fertilized by two sperms different in sex the chromosomes

13

Study the diagram in front of you, which shows a cross-section of a female ovary when using a method of contraception, and then determine:



Which method of contraception was not used in this case?

- A) Loop
- B) Pills
- C) Surgical sterilization
- D) Condom

14

Preventing spreading of pathogens is one of immunity steps that verified by the following ways except:

- A) Tylosis in xylem tracheids
- B) Suberin in cork
- C) Hyper sensitivity in plants
- D) The insulating sheath of the fungal mycelium

15

Study the following processes:

- (X) Recognition of the pathogen and activation of immune mechanisms
- (Y) Inability of bacteria to reproduce
- (Z) Ineffectiveness of toxins secreted by pathogens,

The following substances are responsible for these processes.

- A) (X) Receptors – (Y) Phenols - (Z) Detoxifying enzymes
- B) (X) Receptors – (Y) Glycosides - (Z) Canavanine
- C) (X) Glycosides – (Y) Phenols - (Z) Canavanine
- D) (X) Glycosides – (Y) Detoxifying enzymes - (Z) phenols

16

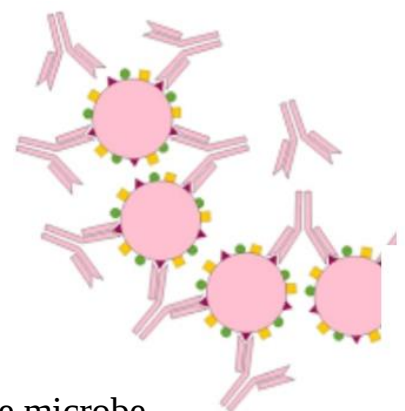
When the disturbance in the genes responsible for producing antimicrobial proteins in the plant are disabled, this will often lead to increase :

- A) The plant immune response against foreign bodies
- B) The spread of toxins within plant tissues
- C) Receptors that detect the presence of the microbe
- D) The ability to eliminate infected tissues

17

Study the diagram in front of you, which . illustrates how antibodies work

Which of the following options does not represent this diagram?



- A) Antibody specificity
- B) The binding of the antibody to any antigen on the microbe
- C) The binding of the antibody to more than antigen from the same type
- D) Antibody binding to different types of antigens

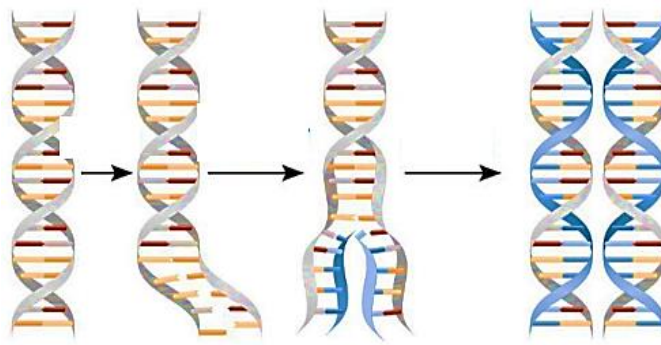
18

In the Hershey and Chase experiment, the presence of radioactive materials inside the bacterial cell indicates:

- A) Viruses use DNA as a carrier of genetic information
- B) Some proteins enter the cell and transmit genetic information.
- C) RNA is the genetic material of bacterial strains .
- D) The genetic material of viruses contains radioactive phosphorus

19

Study the diagram that illustrates one of the vital processes in a cell.



What is the importance of this process?

- A) Protein building.
- B) mRNA transcription.
- C) Division and growth.
- D) Insulin gene cloning

20

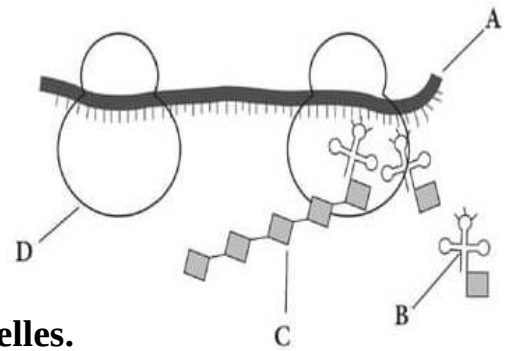
Which of the following is considered the main factor in repairing DNA defects when damage occurs?

- A) The presence of ligase enzymes only
- B) The presence of two identical copies of genetic information
- C) The break down occurred in only one of the two strands.
- D) The presence of a template that enzymes use to repair the damage

21

You have three types of RNA: x, y, and z.

- (x) RNA contains hydrogen bonds between some of its nucleotides.
- (y)RNA binds to proteins to form cell organelles.
- (z) RNA can bind to a large number of organelles that are made up of (y) RNA.

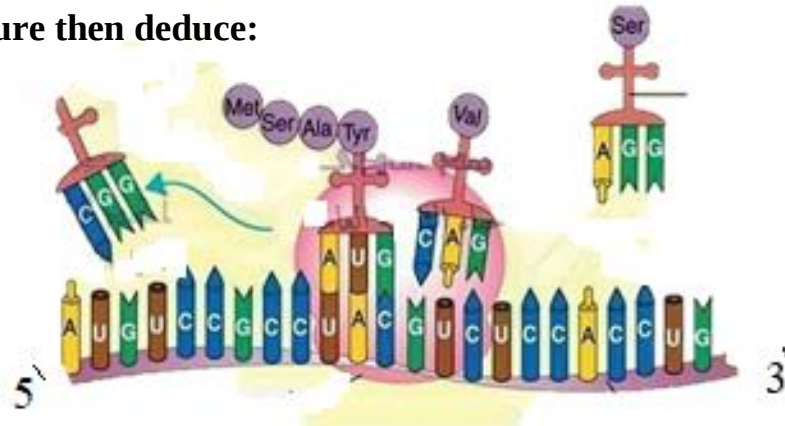


Which of the structures in the above drawing represents (z) RNA?

- A) A
- B) B
- C) C
- D) D

22

Study the figure then deduce:



Which of the following is NOT one of the processes that occur in this figure?

- A) The action of the peptidyl transferase enzyme
- B) It works under the large sub- unit of ribosome.
- C) Action of nucleic acid t - RNA
- D) Action of releasing factor protein

23

If you knew that it was possible to obtain golden-colored rice grains by transferring the alpha-carotene pigment gene from carrot plant cells through the following steps (in no particular order):

- a) The gene is amplified using PCR.
- b) Many genetically modified plants can be obtained using tissue culture.
- c) The gene is cultured which was isolated from the cells of some leaves of the rice plant
- d) Bacterial restriction enzymes are used to isolate the gene from carrot DNA molecule.

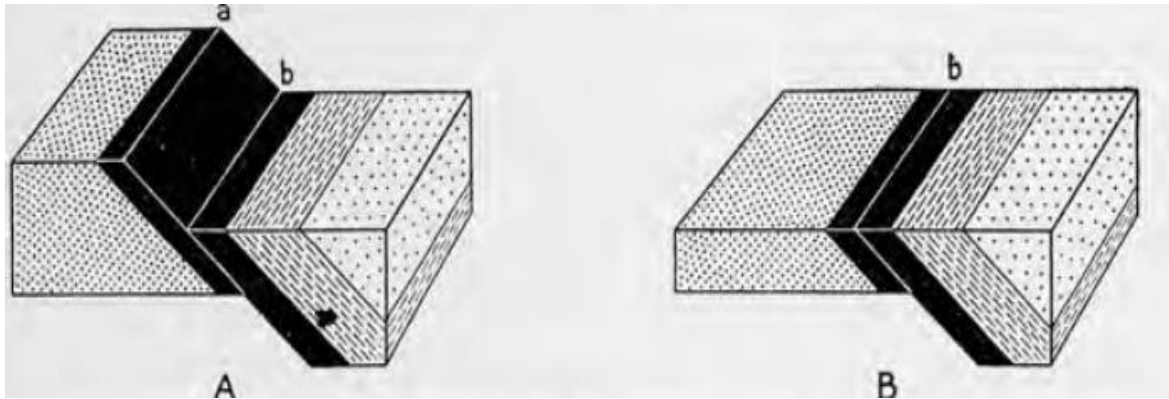
What is the correct order to get a genetically modified rice?

- A) a- b - c – d
- B) d - a - c – b
- C) b – a – d – c

D) a – c – d – b

24

In the diagram in front of you, what is the relationship between diagram (A) and diagram (B)?



- A) (A) A reverse fault that has undergone erosion and weathering in (B).
- B) (A) A normal fault that has undergone erosion and weathering in (B).
- C) (A) A reverse fault that has been subjected to tectonic forces and formed a thrust fault in (B).
- D) (A) A normal fault that has been subjected to tectonic forces and formed a thrust fault in (B).

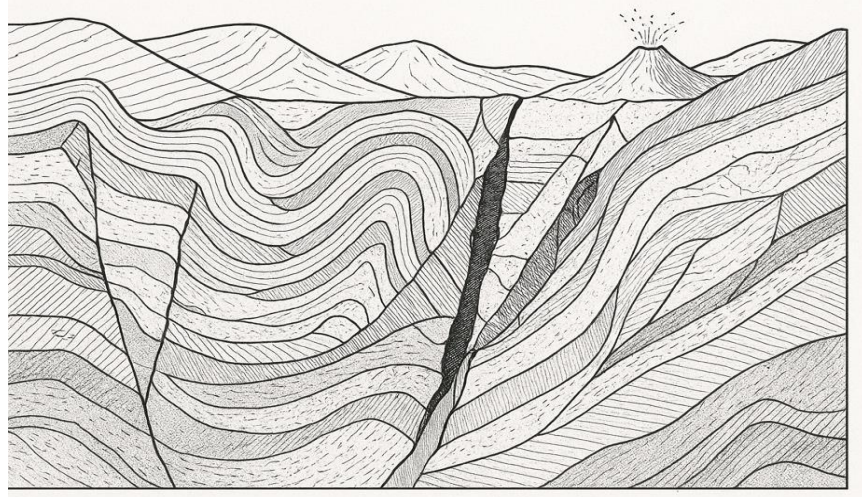
25

An area at sea level with grains ranging in size from 1000 to 1500 microns in a wavy, undulating pattern is classified as:

- A) Primary – Ripple marks
- B) Secondary – Continuous folds
- C) Primary – Cross-bedding
- D) Secondary – Unconformity

26

The following geological cross-section contains a set of geological structures. Which of the following structures is **NOT** present in the previous cross-section?



- A) Faults
- B) Folds
- C) Angular Unconformity
- D) Laccolith

27

Which of the following statements geologically defines a mineral correctly?

- A) A naturally occurring, homogeneous solid with a fixed chemical composition and regular internal atomic arrangement.
- B) Any substance extracted from the earth that has high economic value and stable colors
- C) Any inorganic solid substance
- D) A rock with a bright luster and vibrant colors

28

Which of the following are characteristic properties of a metal used in car body manufacturing? What is its mineral group?

- A) Color change / Silicate
- B) Magnetic susceptibility / Silicate
- C) Gray streak / Carbonate.
- D) Red streak / Oxides

29

A mineral belongs to the carbonate group that reacts with hydrochloric acid, has cleavage and vitreous luster, which indicating that this mineral could be:

- A) Calcite
- B) Quartz
- C) Gypsum
- D) Halite

30

A sample of a mineral has crystal axes of unequal lengths that are perpendicular to each other.

To which of the following crystal systems does this mineral belong?

- A) Cubic crystal system;
- B) Trigonal crystal system;
- C) Monoclinic crystal system;
- D) Orthorhombic crystal system;

31

Which of the following processes represents the basic initiation of igneous rock formation in the rock cycle?

- A) Erosion and weathering of existing rocks.
- B) Deposition and cementation of sediments.
- C) Metamorphism of existing rocks under the influence of heat and pressure.
- D) Crystallization of magma or lava as it cools and solidifies

32

Which of the following factors is the primary determiner of crystal size in igneous rocks?

- A) The proportion of carbon dioxide in the magma.
- B) The rate of cooling and solidification of the magma.
- C) The type of minerals that make up the magma.
- D) The pressure exerted on the magma during cooling

ثانياً : الأسئلة الموضوعية (الاختيار من متعدد) " كل سؤال من درجتين "

33

What is the direct cause of gastrocnemius muscle strain?

- A) Insufficient blood supply of oxygen to the muscle reflex action.
- B) Rapid and repeated muscle contractions
- C) Deficiency of ATP molecules
- D) Excess lactic acid

34

Which of the following glands its secretions are affected by nervous stimulation, hormonal stimulation and concentration of a definite substance in the blood?

- A) Adrenal gland
- B) Thyroid gland
- C) Ovary
- D) Pancreas

35

Which of the following is NOT a reason for the increased ability of bread mold to reproduce?

- A) Its heterotrophic nutrition
- B) Abundant spore production
- C) Spore tolerance to harsh conditions
- D) The ability of spore for spreading

36

In a farm, a very large crop of broad beans with desirable characteristics was produced.

Which of the following is the reason for this?

- A) Pollen grains transfer from the anther of the flower to the stigma of the same flower
- B) Pollen grains transfer from the anther of the flower to the stigma of another flower on the same plant
- C) Pollen grains transfer from the anther of one flower to the stigma of another flower on a different plant from the same species
- D) The presence of a large number of insects

37

The level of luteinizing hormone (LH) in the blood decreases when...

- A) Estrogen levels increase.
- B) Progesterone levels increase.
- C) Both estrogen and progesterone levels increase.
- D) Estrogen levels decrease then increase.

38

A man suffers from infertility. Upon conducting the necessary medical tests, it was found that the sperm did not reach the fallopian tube.

Which of the following structures is the cause of infertility in this case?

- A) Absence of the acrosome and tail
- B) Absence of the centrosome and middle piece
- C) Absence of the tail and middle piece
- D) Presence of a large number of mitochondria and absence of the neck.

39

A patient is receiving T-cell suppressive therapy after a kidney transplant.

What are the consequences of this condition?

- A) Decreased risk of viral infection.
- B) Increased risk of organ rejection.
- C) Increased risk of viral infection.
- D) Decreased macrophage activity.

40

A scientist analyzed a DNA sample and found that it contained histones and several genes with both coding and non-coding sequences.

Which of the following organisms possesses this sample?

- A) Bacteria
- B) Polio virus
- C) Yeast fungus
- D) Bacteriophages

41

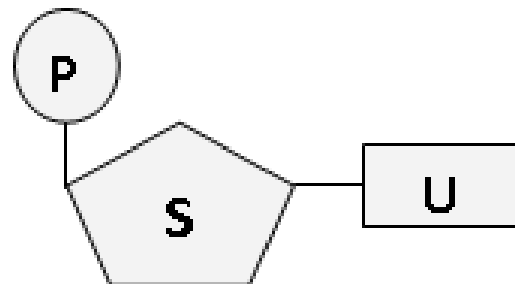
During gamete formation in an organism, a ligase enzyme failed to function properly in one of the cells. What was the effect of this disturbance on DNA of this cell?

- A) A new nucleotide set was added to it.
- B) Absence of a group of nucleotides from it.
- C) Absence of some chemical bonds from it.
- D) Decrease number of hydrogen bonds in it.

42

The diagram shows the building unit of a nucleic acid.

Which of the following has a role in determining the nucleic acid type through examining this figure?



- A) Type of nitrogenous base.
- B) Type of pentose sugar.
- C) Number of carbon atoms in sugar.
- D) Phosphate group.

43

Which of the following from main contributions of the human genome project in medicine field?

- A) Determining the structure and function of protein.
- B) Understanding and treatment of genetic diseases
- C) Determining the difference of transcription and translation ways in different diseases.
- D) Determining the environmental factors causes cancer.

44

Solid remains of marine vertebrates contribute to the formation of:

- A) Sandstone
- B) Coal
- C) Phosphate and limestone
- D) Sandstone and oil shale

ثالثاً: الأسئلة المقالية " كل سؤال من درجتين "

45

Some contaminated foods can cause infection by serious diseases.

a) Determine which mechanisms of innate immunity contribute to resisting the pathogens of these diseases.

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b) Explain why these methods are unable to resist the causes of these diseases?

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46

Element (A)	Element (B)	Element (C)
From sulfides	vitreous luster	metallic luster
Transparent yellow	Its hardness is > 6.5	Black scratch

a) Deduce the name each of element (A) and element (C)?

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b) Determine the importance of element (B)?

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إنتهت الأسئلة

