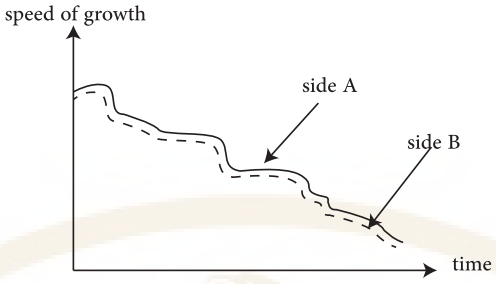
تدريبات على أختبار أحياء باللغة الانجليزية للصف الثالث الثانوى 2021

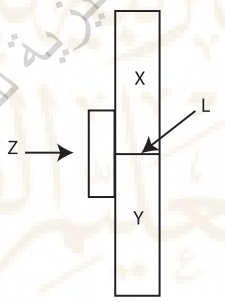
1. Study the graph that illustrates the speed of growth of the two sides of a tendril of a climbing plant, then determine:



What can you deduce from the graph?

- The tendril didn't find the suitable support.
- The tendril is in a stage of searching for the support.
- The tendril twins around the support.
- The plant grows vertically upward.

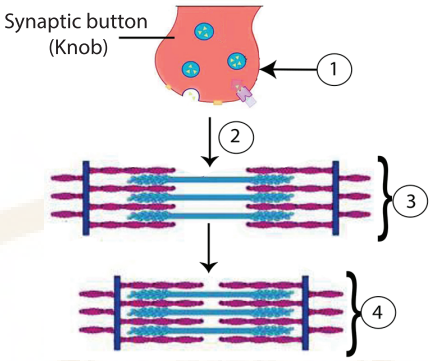
2. If the structures (X) and (Y) have the same type of tissues and the structure (Z) connects between them,



What does letter (L) refer to?

- Joint.
- Tendon.
- Ligament.
- Muscle.

3. The figure in front of you represents the neuro-muscular junction (synapse). Study it and answer:



Which of the following shows the role of calcium ions?

- (1) only
- (4) only
- (1) & (4)
- (3) & (4)

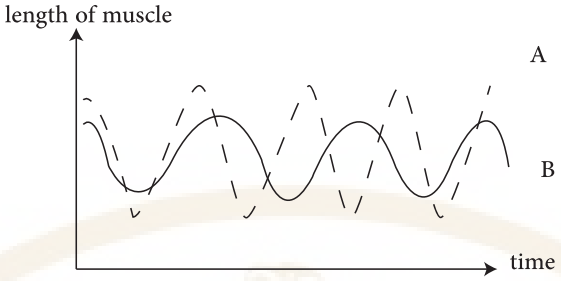
4. What is meant by the functional unit of one of the muscles is composed of 75 structural unit?

- The motor nerve fibre supplies 75 muscle fibers.
- The motor unit is composed of from 5 : 75 muscle fibers.
- There are 75 motor nerve supplies the motor unit.
- The number of terminal barbarizations that supply a structural unit is 75.

5. Which of the following indicates the occurrence of fatigue in one of skeletal muscles?

- The rapid consumption of glycogen stored in the muscle.
- Decrease the consumption of glucose exists in the blood that supplies the muscle.
- The rapid oxidation of lactic acid accumulated in the muscle.
- Increase the amount of (ATP) formed inside the muscle .

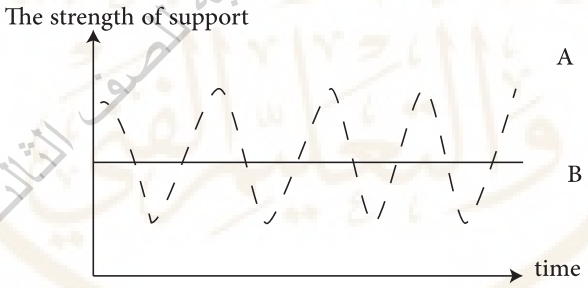
6. Study the graph that illustrates the change in the length of the gastrocnemius muscle during walking for the same person, where (A) and (B) express two different cases of the gastrocnemius muscle.



What could be expected in terms of the distance that will be covered by the person in each case?

- The distance in the two cases (A) and (B) are equal.
- The distance in case (A) is greater than that of the case (B).
- The distance in case (A) is smaller than that of the case (B).
- There is no relation between the change of the gastrocnemius muscle length and the distance that is covered.

7. Study the graph that illustrates the strength of two types of support in plants, A and B then conclude .



What is the difference between the two supports (A) and (B)?

- The support (A) deals with the cell wall.
- The support (A) acquires hardness and protection to the cells.
- The support (A) is temporary and the support (B) is permanent.
- The support (A) depends on deposition of new materials on the cell wall, while the support (B) depends on the presence of water in the sap vacuole.

8. If a person keeps his Balance during sudden stopping of metro.

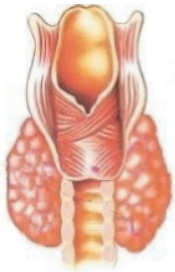
What is responsible for the stability of this person?

- Voluntary muscles contraction.
- Smooth muscles contraction.
- Smooth muscles relaxation.
- Cardiac muscles relaxation.

9. What are the types of stimuli for the exocrine and the endocrine glands of pancreas respectively?

- Hormonic and concentration of a certain substance in blood.
- Hormonic and hormonic.
- concentration of a certain substance in blood and hormonic.
- concentration of a certain substance in blood and concentration of a certain substance in blood.

10.



The figure illustrates the thyroid gland in human.

What does indicate that this figure is the posterior view of the gland?

- The appearance of the parathyroid gland.
- The red color of the two lobes.
- The appearance of the vesicles in the two lobes of the gland.
- The two lobes are not connected.

11. What is the role done by Cloud Bernar in the discovery of hormones?

- Considering the liver an endocrine gland.
- Illustrating the presence of different types of secretions.
- Considering the liver is a mixed gland.
- Identifying the components of bile juice.

12. Study the table in front of you that expresses the result of medical analysis that measures the concentration of ACTH and Aldosterone hormones in blood , then determine.

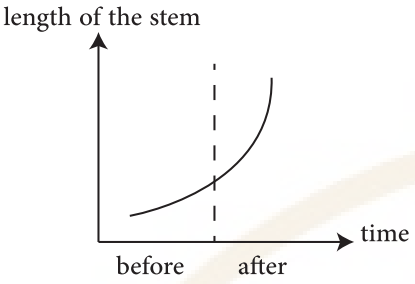
Hormone	Concentration of hormone in blood	Normal range	
		From	To
ACTH	10.5	0.5	2.5
Aldosterone	25	5	10

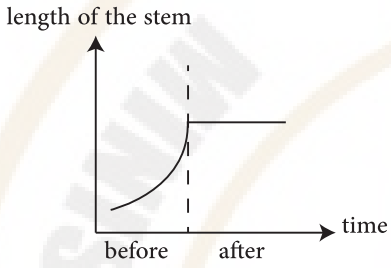
What can you conclude?

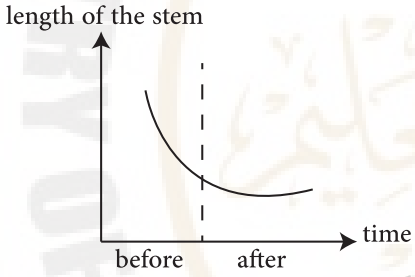
- Disturbance in both of the pituitary gland and the adrenal gland cortex.
- The adrenal gland cortex responds to hyperactivity of the pituitary gland.
- The pituitary gland works normally with enlargement of the adrenal gland cortex.
- Both of the two glands work normally.

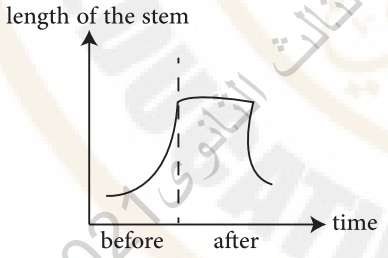
13. A researcher measured the change of the length of a plant stem in a suitable conditions before and after removing the plant growing tip.

Which of the following graphs expresses the results during this experiment?

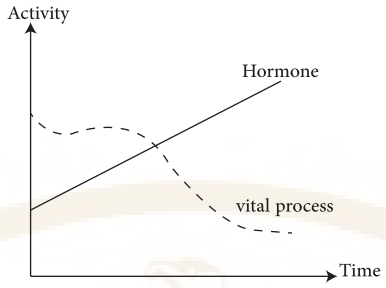
- 

- 

- 

- 

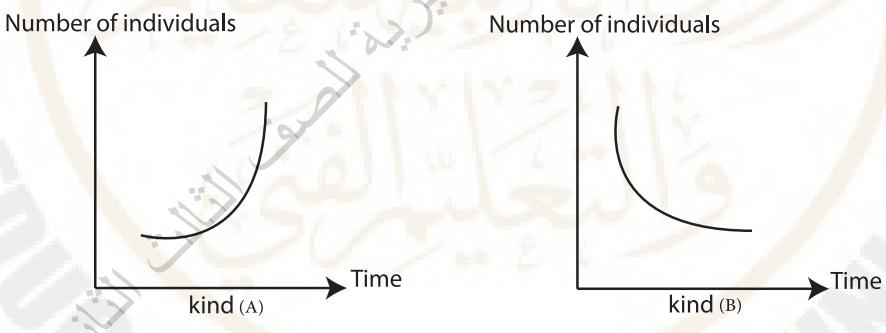
14. The graph in front of you illustrates the relation between the change of a hormone's activity and a vital process which affected by this hormone.



What is the conclusion about the role of this hormone?

- Inhibitor.
- Stimulator.
- Regulator.
- Has no effect.

15. In a study of two types of living organisms (A & B) in a forest, the results were obtained and represented by the following graphs. Study them and determine:



What distinguishes the kind (A) from the kind (B)?

- The conditions are not suitable for the continuity of the kind (A).
- The kind (B) seeks for the continuity of the individuals of its kind.
- The kind (B) produces more progeny than the kind (A).
- The conditions are suitable for the continuity of the kind (A).

16. What is the reason that the female of aquatic turtle lays about 200 eggs, while that of desert turtle lays 30 eggs?

- Means of nutrition.
- Prevalent hardships.
- Type of reproduction.
- Type of movement.

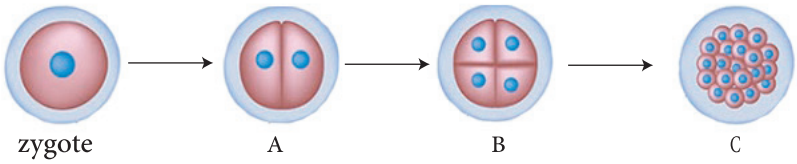
17. What is the difference between scalariform conjugation in spirogyra and reproduction in bony fish?

- Type of reproduction.
- Surrounding conditions.
- The number of individuals sharing in it.
- Formation of zygote.

18. What is longest duration between two successive divisions in the following cells in human?

- Secondary oocyte, mature ovum.
- Primary germ cell, oogonia.
- Primary oocyte, secondary oocyte.
- Oogonia, Primary oocyte.

19. Study the figure which represents some of the zygote devoloping stages.



What is the location of mass of cells (C) in the female reproductive system before the end of the first week after fertilization?

- End of fallopian tube.
- First third of fallopian tube.
- Second third of fallopian tube.
- Endometrium.

20. Which of the following confirms the type of twins inside the mother uterus in the fourth month of pregnancy?

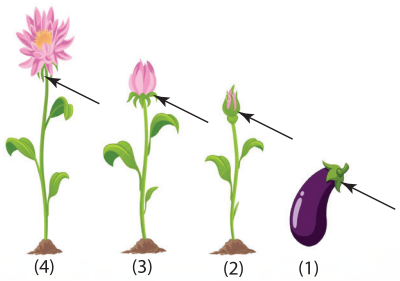
- The placenta.
- Sex of embryo.
- Similarity in traits.
- The embryonic sac.

21. A woman had a sterilizing surgical operation that done by ligation of the two Fallopian tubes, and after a period of time she could deliver a child.

How could this be explained?

- Capability of re-opening Fallopian tubes.
- Depending on re-nucleation.
- Occurring the pregnancy naturally.
- Using test-tube babies technique.

22.



Which of the previous figures illustrates the main role of the structure that is referred by the arrow ?

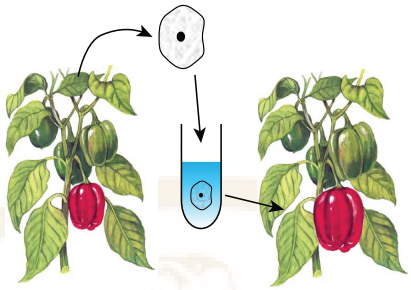
- 2
- 3
- 4
- 1

23. Husband and his wife were late in giving birth and by examining the husband they found that his sperms die before exit from body due to absence of nourishment :

Which part of the male genital system responsible for this problem?

- Sertoli cells.
- Interstitial cells.
- Spermatogonia.
- Prostate gland.

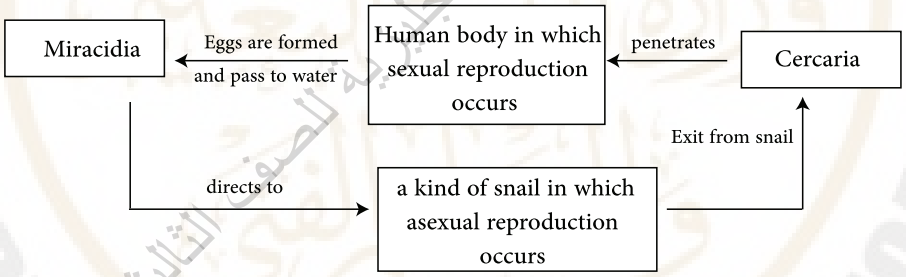
24. Study the opposite figure, which illustrates one of the modern techniques for artificial reproduction in plants, and determine:



What is the main purpose of this technique shown in the figure?

- Solving food problem.
- Producing individuals carry new characters.
- Producing individuals completely similar to the parent.
- Increase the length of the plant.

25. Study the diagram that expresses the life cycle of parasite Bilharzia worms, then determine:



What is the importance of the phenomenon represented by the diagram?

- Constancy of genetic traits and facing the unfavorable conditions.
- Increase the individuals' numbers and the biological expenses.
- Increase the individuals' numbers and genetic diversity.
- Decreasing the biological expenses and not adapting with the environmental conditions.

26. Study the figure which illustrates the stages of bean plant ovum formation:

Primary germ cell (2 n) —A→ Four cells 3 degenerate —Mitotic division→ B

What do (A) and (B) represent respectively?

- Meiotic division , 8 nuclei.
- Mitotic division , 4 cells.
- Meiotic division , 4 nuclei.
- Mitotic division , 8 cells .

27. Which one of these fruits is different in its type from the others?

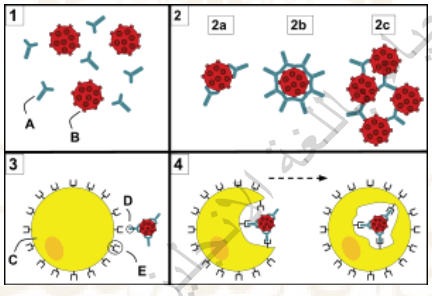
- 
- 
- 
- 

28. pregnant woman in her second month of pregnancy (in twins) performed TV rays (sonar)to know the sex of embryo, the doctor told her that the embryos are two boys. according to that determine:

What is the reason that make this woman pregnant in this twins?

- Cleavage (division)of ovum fertilized by two sperms.
- Cleavage (division)of ovum fertilized by one sperm.
- Liberation of two ova and their fertilization by two sperms that are different in sex chromosomes.
- Liberation of one ovum and its fertilization by two sperms that are similar in sex chromosomes.

29. The figure illustrates one of the antibodies mechanisms.



What is most distinguishing of this mechanism from other antibodies mechanisms?

- It requires the presence of complements.
- Its occurrence is limited to one type of the antibodies.
- It doesn't require the role of phagocytes.
- Its occurrence depends on the nature of antigen.

30. Study the table in front of you that expresses the result of blood sample analysis for a person, then determine.

Type of cells	Result	Normal range	
		From	To
T_H	50	20	30
T_C	30	30	40
B	20	5	10
NK	2	1	3

What is the type of immunity that is actived in this person?

- Cellular.
- Non_specific.
- Humoral.
- Inherited.

31. Which of the following occurs during the inflammatory response?

- Hyperactivity of macrophages.
- Secreting substances decrease the blood supply at the area of inflammation.
- Increase the production of white blood cells in bones marrow.
- Secretion of interferons from the mast cells.

32. "A person was infected by a viral disease that leads to breaking down of a type of white blood cells, when carrying analysis of a blood sample for this person, the result was as shown in the table"

Study the table, then determine

The substance	Result	Normal range	
		From	To
CD8	50	40	60
CD4	10	20	40
MHC	20	15	30
Histamine	2	1	3

Which cells that are affected by this virus?

- B
- Mast cells.
- T_H
- T_S

33. Which of the following is NOT considered from the components of immune system in human?

- Antibodies.
- Complements.
- Antigens.
- Interferons.

34. What is the immune role that is played by cells infected by RNA genome viruses inside human body?

- Secreting enzymes that kill pathogens inside the cells.
- Secreting protein substances that stimulate the neighboring healthy cells.
- Production of poisoning chemical substances for the pathogen.
- Stimulates the plasma B cells for producing antibodies.

35. Which of the following cells that its number is not increase in a person infected by cancer?

- Natural killer cells.
- T- Cytotoxic cells.
- B- cells.
- T -Helper cells.

36. What is the substance that its secretion indicates the complementary between humeral and cellular immunity?

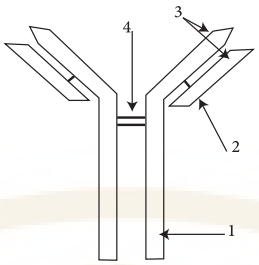
- Lymphokines.
- Interferons.
- Histamine.
- Cytokines.

37. "Some types of beans can resist fungi by formation of a substance that prevents the germination of the fungal spores"

Which of the following immune mechanism does this substance belong to?

- Receptors.
- Detoxifying enzymes.
- Phenols.
- Non protein amino acids.

38. Study the figure in front of you that illustrates the structure of a type of antibodies, then determine.



Which area that contains a different type of bonds from the other bonds in this molecule?

- 1
- 4
- 2
- 3

39. Which of the following properties indicates the degree of both complexity and evolution of the living organism?

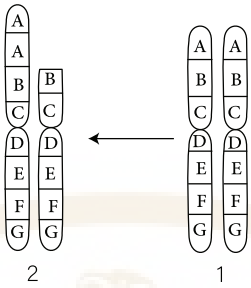
- Amount of (DNA) exist in its cells.
- Amount of protein formed in its cells.
- Number of types of amino acids in its cells.
- Multiple types of (RNA).

40. In one cell of a living organism , a change occurred in the DNA strands, and after transcription of m- RNA from one strand of DNA, translation process was stopped in the middle of this m-RNA.

What is your explaination of this case?

- Different bases are lost in different times from DNA strands.
- Two complementary bases are lost at the same time from the two DNA strands.
- One purine base was lost from one strand of DNA.
- Two comlementary bases were lost in different times from the two DNA strands.

41. Study the diagram that illustrates a group of genes on a pair of homologous chromosomes during formation of gametes, then deduce:



What is the consequence of this case?

- Gene mutation and the sequence of nitrogenous bases changes.
- Gene mutation and the protein type will change.
- Cromosomal mutation and the effect of gene (A) does not changed.
- Chromosomal mutation and the effect of gene (A) increases.

42. Knowing that percentage of thymine on one of (DNA) strands is 20%:
What is ratio of the adenine in the same strand ?

- Unknown
- 20%
- 30%
- 80%

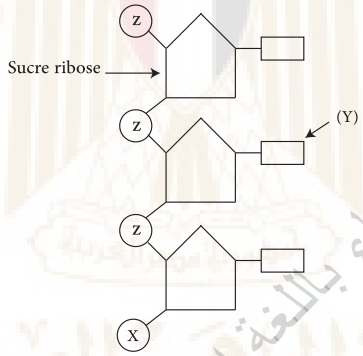
43. Which of the following distinguishes (DNA) in eukaryotes from that in prokaryotes ?

- Carries the code responsible for building three types of (RNA).
- Can be cut by the restriction enzymes.
- Duplicates before cell division.
- Found in the form of nucleosomes.

44. What is the result of using man to radioactive or chemical substances to cure plant cells and fungus to produce more amounts of proteins?

- Change the type of protein resulted from translation.
- Repeating genes due to the increase number of chromosomes.
- Repeating of one gene many times on the same chromosome.
- Repeating nitrogenous bases on the same gene.

45. Study the drawing in front of you which illustrates a strand of a nucleic acid then determine.



What are referred by the two symbols (X) and (Y) respectively?

- Hydroxyl , Cytosine.
- Hydroxyl , Thymine.
- Phosphate , Guanine.
- Phosphate , Uracil.

46. The gevin table illustrates the building codes of some different amino acids, if the sequence of nucleotides on one of (DNA) strands is :

Genetic code			Amino acid
UCC	AGU	UCU	Serine
AGG	CGC	AGA	Arginine
CCA	CCC	CCU	Proline

'3. . . . TACTCTGTTAGAATC ….'5 And during transcription of (m RNA) the base (T) indicated by arrow replaced by base (C):

What is the result of that?

- Changing type of protein.
- Formation of the same protein.
- Stop of translation processes.
- Stop of the transcription of (mRNA).

47. In the traditional classification of living organisms, they were classified into two kingdoms, but after studying the evolution of living organisms, they were classified into five kingdoms in the modern system of classification:

What is the technique on which scientists depended to classify living organisms into five kingdoms?

- Cloning DNA.
- Recombinant DNA.
- Producing artificial genes.
- Hybridization of DNA.

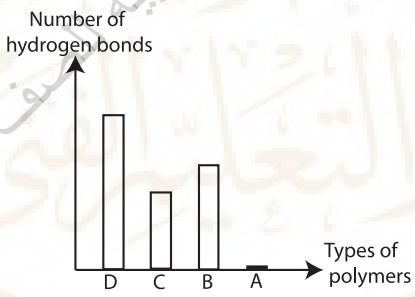
48. The following sequence illustrates the arrangement of amino acids in part of polypeptide from left to right:

First	Second	Third	Fourth	Fifth
Tryptophan	Arginine	Serine	Valine	Lysine
UGG	CGG	AGU	GUU	AAA

Which of the following (DNA) pieces expresses the gene that form the sequence of amino acids shown in the table?

- '5ACCGCCTCACAATTTATT3'
  '3TGGCGGAGTGTTAAATAA5'
- 3'TTTCAATCAGCCACCACT5'
  5'AAAGTTAGTCGGTGGTGA3'
- 5'TTTCAATCGCCACCACTA3'
  3'AAAGTTAGCGGTGGTGAT5'
- 3'ACCGCCTCACAATTTATT5'
  5'TGGCGGAGTGTTAAATAA3'

49. Study the graph and deduce:



What is the symbol that refers to the mRNA polymer?

- A
- B
- C
- D

50. What are the necessary processes that occur in the cell to complete the production of the two ribosomal subunits?

- Transcription of mRNA in the nucleus and its translation in the cytoplasm into 70 types of polypeptides.kinds
- Transcription of rRNA in the nucleolus and its uniting with the 70 kinds of polypeptides in the cytoplasm.
- Transcription of rRNA in the nucleus and translation of mRNA in the cytoplasm into 70 kinds of polypeptides.
- Transcription of rRNA in the nucleus and its uniting with the 70 kinds of polypeptides in the cytoplasm.