الأسئلة الاسترشادية لمادة الأحياء

للصف الأول الثانوي- الفصل الدراسي الأول- للعام الدراسي ٢٠١٩/٢٠٢٠

(النسخة الإنجليزية)

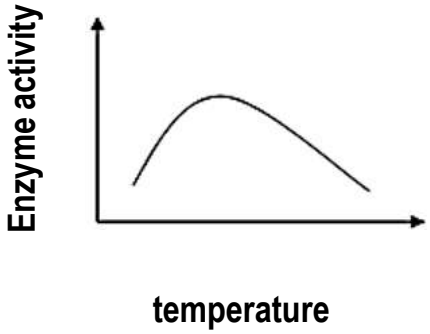
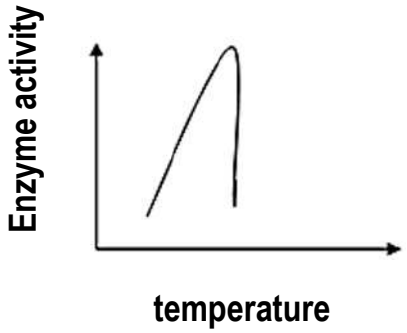
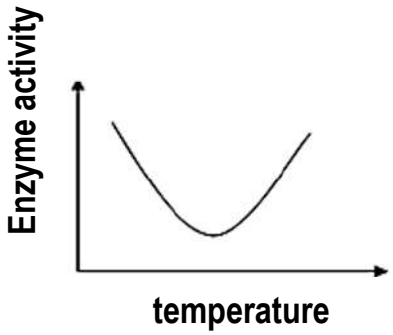
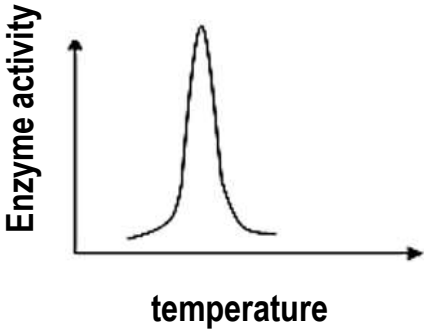
On adding Biuret reagent to a solution of sample (X), the color of solution became violet. After that, a substance (Y) was added to another sample of substance (X) with few drops of hydrochloric acid, and after half an hour, the Biuret reagent was added to this sample and no change in the color of the reagent.

(1) **From what you have studied, determine from the table the substance (X) and substance(Y).**

	substance (X)	substance(Y)
(A)	Egg	Trypsin
(B)	Piece of meat	Pepsin
(C)	Milk	trypsin
(D)	Corn oil	Pepsin

(2) **If you know that enzyme (X) is highly sensitive for change in temperature.**

Which of the following graphs express the activity of this enzyme?

<table>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>(A)</td><td>(B)</td></tr>
<tr><td> 
</td><td> 
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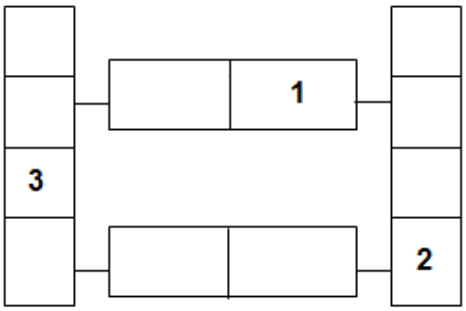
<tr><td>(C)</td><td>(D)</td></tr>
</table>

Examine the figure in front of you which represents the structure of a part of DNA,



(3) **What are the arrangement of (1), (2) and (3) to represent its correct structure?**

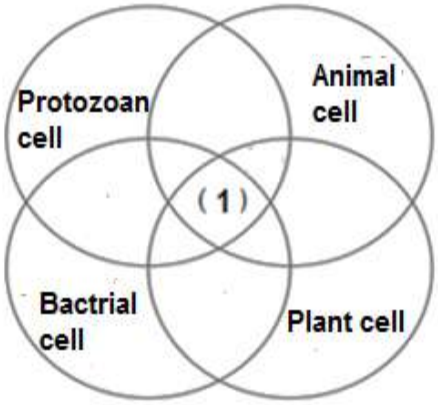
(A) (1) pentose sugar, (2) nitrogen base, (3) phosphate group .

(B) (1) pentose sugar, (2) phosphate group, (3) nitrogen base.

(C) (1) nitrogen base, (2) pentose sugar , (3) phosphate group .

(D) (1) phosphate group, (2) nitrogen base , (3) pentose sugar.

The opposite diagram illustrates (Venn shape) the components of the ultra-structures of cells in four different living organisms.



(4) **What is the component that represented by number (1)?**

(A) Cell membrane.

(B) Cell wall.

(C) Green plastid.

(D) Centrosome

Tay–Sash's disease is a genetic disease that resulted from a disturbance in one of the somatic chromosomes, which causes the breaking down of enzymes that digest the complex lipids leading to their accumulation in the cells of brain and spinal cord and their destruction.

(5) **Which organelle is responsible for this case?**

(A) Endoplasmic reticulum.

(B) Golgi bodies.

(C) Lysosomes.

(D) Mitochondria.

(6) **Which microscope is used in studying the details of the inner surface of mitochondria in a muscle cell?**

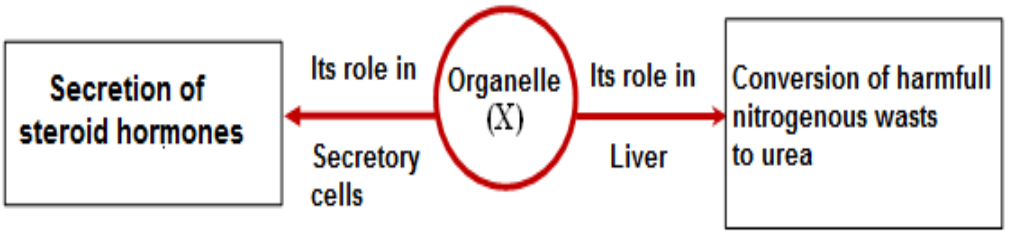
(A) Simple microscope.

(B) Compound microscope.

(C) Scanning electron microscope.

(D) Transmitting electron microscope.

Study the following diagram, then answer:



(7) **What does (X) represents?**

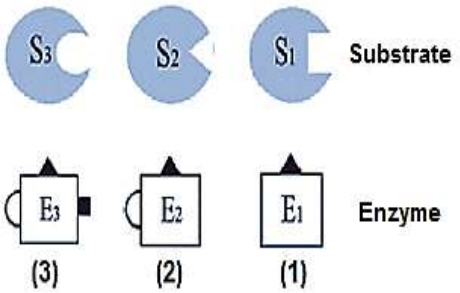
(A) Endoplasmic reticulum.

(B) Golgi bodies.

(C) Lysosomes.

(D) Mitochondria.

Study the following diagrams, and then conclude:



(8) **Which of the following represents the properties of the enzymes in the above diagrams?**

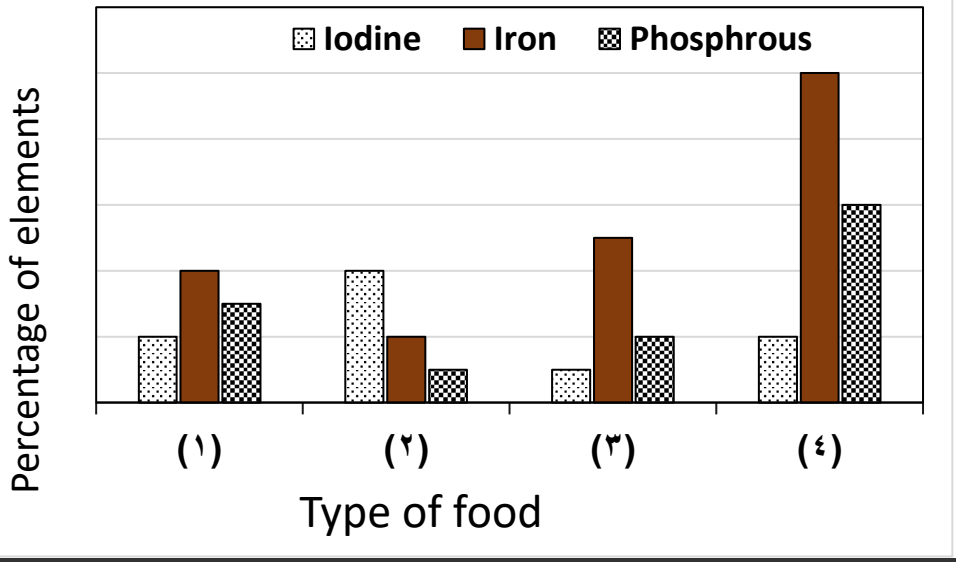
(A) Enzyme (1) is less specialized than enzyme (3).

(B) Enzyme (2) is less specialized than enzyme (3).

(C) Enzyme (1) is highly specialized than enzyme (3).

(D) Enzyme (3) is highly specialized than enzyme (1).

Study the following diagram which represents the percentages of different nutritive elements in some types of food, then determine



(9) **Which type of food participates effectively in process of gas exchange in human blood?**

(A) (1)

(B) (2)

(C) (3)

(D) (4)

(10) **On which of the following does classification of simple lipids depends on?**

(A) Type of alcohol.

(B) Type of fatty acid.

(C) Type of alcohol and fatty acid.

(D) Type of element in its structure.