Biology

1- Give the similarities and differences between simple squamous tissue and Simple columnar tissue.

2- In the given graph, which of the two curves (a) or (b) indicates the presence of an enzyme in the reaction?

-Explain your answer.

3- Explain why suitable temperatures are labeled on industrial detergent used for clothes.

4- If you know that the magnifying power of the compound microscope is 500, and the magnifying power of the ocular lens is 50, calculate the magnifying power of the objective lens.

5- The graph below shows the relationship between the number of cristae on the internal surface of the mitochondria and the cell type.

- What type of cells is represented by column (b)?

6- Complete the following table to illustrate the site and the type of vascular connective tissue:

The tissue name	**Plant or animal**	**Simple or complex**
vascular connective		

7- The diagrammatic figure below shows the structure of an animal cell:

The possible composition of the building unit represented by the part X is ……..

a- Pentose sugar + phosphate group + nitrogenous base " thymine"

b- Hexose sugar + phosphate group + nitrogenous base " uracil"

c- Pentose "ribose" sugar + phosphate group + nitrogenous base " uracil"

d- Pentose "ribose" sugar + phosphate group + nitrogenous base " thymine"

8- Choose the correct answer:

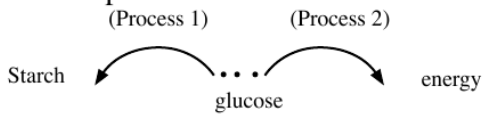
When using the microscope, to increase the differentiation between parts of sample ……done:

a- Using dyes to dye specific parts in the sample.

b- Change the microscope from time to time.

c- Change the sample by a better one.

d- Cutting the sample into separate sections.



9- Choose the answer expressed by the diagram above :

a- Process (2) is catabolism while process (1) is anabolism

b- Process (1) is catabolism while process (2) is anabolism

c- Both processes (1, 2) are catabolism.

d- Both processes (1, 2) are anabolism.

10- ATP molecule is formed due to combination of ADP + P in the presence of energy, so the proper sequence of using the stored energy in it is :

a- Glycogen – glucose – ATP – energy.

b- Glucose – starch – ATP – energy.

c- Energy – glucose – ATP – energy.

d- Glucose – energy – ATP – energy.

11- The given figure represents one of the cell organelles:

These organelles are most abundant in the cells of ……

a- Liver and muscles

b- Endocrine glands and secretory cells

c- Endocrine glands only

d- secretory cells only

12- Study the given figure:

Which of the following statements is true according to the enzymes illustrated in the figure?

a- Enzyme No. (1) is less specialized than Enzyme No. (3)

b- Enzyme No. (1) is higher specialized than Enzyme No. (3)

c- Enzyme No. (2) is less specialized than Enzyme No. (3)

d- All these enzymes are highly specialized.