PENANG SANGAM HIGH SCHOOL
YEAR 11 BIOLOGY
SUPPLEMENTARY RESOURCES

Week 4

(Use notes on biological classification to answer question 1 and 2)

1. In the levels of biological organisation, the eye is considered a/an
A. cell.
B. organ.
C. tissue.
D. individual.

2. Which of the following shows an increasing order of complexity?
A. cell, molecule, atom, tissue
B. cell, tissue, molecule, atom
C. atom, molecule, tissue, cell
D. atom, molecule, cell, tissue

3. Which two structures are found **only** in plant cells? **(Hint: compare plant and animal cell)**
A. nucleus and cell wall
B. nucleus and sap vacuole
C. chloroplast and cell wall
D. chloroplast and cell membrane

4. Which cellular organelle contains enzymes that are considered digestive? **(Refer to the table on cell organelles and function)**
A. nucleus
B. lysosomes
C. ribosomes
D. golgi apparatus

5. State two differences between a plant and an animal cell. **(Hint: Refer to the table on plant and animal cell in the notes)**

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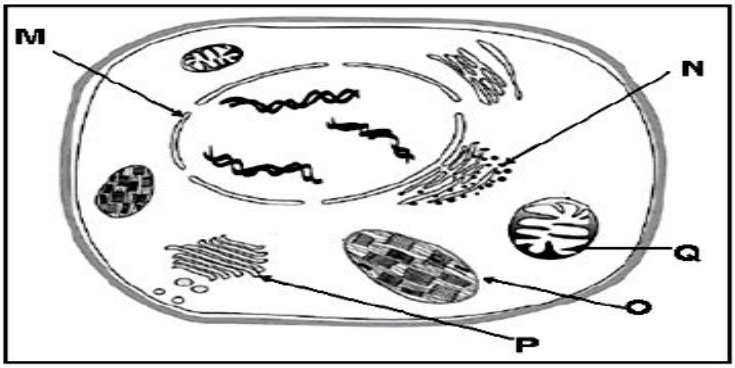
_____

6. The diagram below shows the structures of a typical cell. **(Hint: refer to notes on animal cell)**



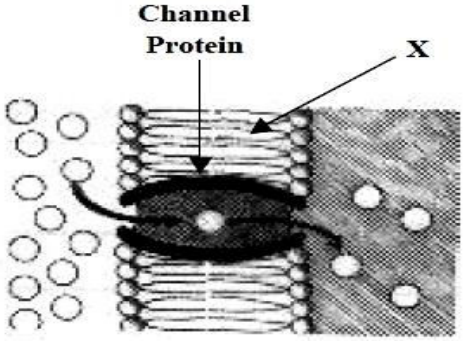
a. Identify the cell above as an animal or a plant cell. Give a reason for your answer.

_____

b. Give ONE advantage of having large numbers of organelle Q in a muscle cell.

_____

7. **Read the notes on types of transportation to answer this question**. The diagram below is an illustration of the process known as facilitated diffusion.



(i) Name the cell organelle labelled **X**. _____

(ii) What is the role of the channel protein?

_____

_____

(iii) How does facilitated diffusion differ from diffusion?

_____

_____

(iv) Explain the biological significance of facilitated diffusion.

_____

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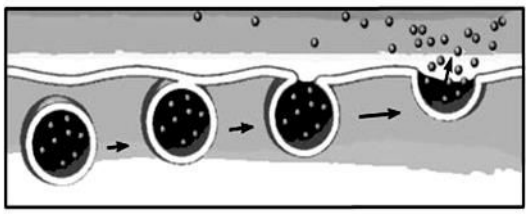
8. The diagram given below shows a cellular process occurring. **(Hint: refer to notes on cytosis)**



Source: *http://g11-bioa-2011-12.wikispaces.com*

The cellular process shown in the diagram is that of a
A. protist releasing food particles.
B. vesicle moving towards the cell membrane.
C. white blood cell digesting foreign materials.
D. collection of food particles moving towards the intestinal walls.