



First Term Test - 2018

Sub: Life Science Class: 7 F. M. 90

Duration: 2 hr's 30 mins

Date: 26/04/18

Group A

1. Multiple Choice Questions:

1x5=5

- The inner membrane of a mitochondria folds inwards to form i) cristae ii) lamellee iii) vesicles iv) none of them.
- Plant cell do not possess i) cell wall ii) plastids iii) centrosome iv) vacuoles
- Paramecium moves with the help of i) flagella ii) pseudopodia iii) cilia iv) tentacle
- Which of the following provides cushioning between bones?- i) tendons ii) ligaments iii) cartilages iv) flexor muscle
- Xylem and phloem are responsible for i) storing food ii) growth iii) manufacturing food iv) transporting materials.

2. Fill in the blanks:

1x10=10

- The term cell was coined by _____.
- The unit measuring cell is the _____.
- Chromosomes are located in the _____.
- Amoeba moves by projecting _____.
- Musclès are attached to bones by _____.
- The skull contains _____ joints.
- Heart muscles are called _____ muscle.
- Air, water and sunlight are _____ factors of an ecosystem.
- Blood is a kind of _____ connective tissue.
- Liquid portion of blood is called _____.

3. State true or false:

1x10=10

- A cell contains various organelles.
- Cartilage is a kind of muscular tissue.
- The cell was first observed in a fruit.
- Chloroplast of responsible for the colors of flower
- Nucleus is filled with nucleoplasm.
- A plant cell is enclosed by cell wall.

- g. Plant cells contains plastids.
- h. Animal cells do not have centriole.
- i. Roots are positively hydrotropic.
- j. Humans are bipedal animals.

Group B

4. Very short answers: 2x5=10
- a. What is organelle?
 - b. What causes the colour of ripe fruits?
 - c. What is an ecosystem?
 - d. What is movement?
 - e. What is Bipedal movement?
5. Give short answer for any five: 3x5=15
- a. Name 4 cell organelles.
 - b. What does nucleus contain?
 - c. How do multicellular organisms grow?
 - d. How does fish locomotes?
 - e. Give 3 examples of Joints in animals.
 - f. What are the different types of meristametic tissue?
 - g. Name the different type of epithelial tissue.

Group C

6. Answer any 8: 5x8=40
- a. Draw an animal cell and label its parts.
 - b. Mention 4 differences between plant and animal cell.
 - c. What are the premises of cell theory?
 - d. State the functions of mitochondria and plastids.
 - e. Draw a neuron, labeling its parts.
 - f. Differentiate between simple and complex permanent tissues. Give examples.
 - g. What are the functions of blood?
 - h. Name the types of moveable joints and their location in the human body.
 - i. Name the types of epithelial tissues. What are their functions?
 - j. Draw and label a plant cell.



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



First Term Test Solution - 2018

Sub: Life Science

Class: 7

F. M. 90

Duration: 2 hr 30 min

Date: 26/04/18

Group A

1. Multiple Choice Questions:

1x5=5

- | | |
|---------------------|---------------------------------|
| a. (i) cristae | d. (iii) cartilages |
| b. (iii) centrosome | e. (iv) Transporting materials. |
| c. (iii) cilia | |

2. Fill in the blanks:

1x10=10

- Robert Hooke
- Micron or micrometer or μm
- Nucleus
- Pseudopodia
- Tendon
- Fixed / immovable
- Cardiac / involuntary
- Abiotic
- Fluid/ specialized / liquid/ vascular
- Plasma / matrix

3. State true or false:

1x10=10

- | | | |
|----------|----------|---------|
| a. TRUE | e. TRUE | i. TRUE |
| b. FALSE | f. TRUE | j. TRUE |
| c. FALSE | g. TRUE | |
| d. FALSE | h. FALSE | |

Group B

4. Very short answers:

2x5=10

- An organelle is a small specialized structure in cells that lie suspended in the cytoplasm and performs different functions.
- The colour of the ripe fruits is due to Chromoplasts.
- An ecosystem is defined as the natural unit comprising the biotic components of a particular area and abiotic component with which they interact.
- Movement is moving part of the body without moving the whole body.
- Bipedal movement is the movement with the help of two legs.

5. Give short answer for any five:

3x5=15

- Names of 4 organelles : Mitochondria, golgi body, plastid, centrosome or any other names.
- Nucleus contains Nucleoplasm, nuclear reticulum, nucleolus, nuclear membrane.

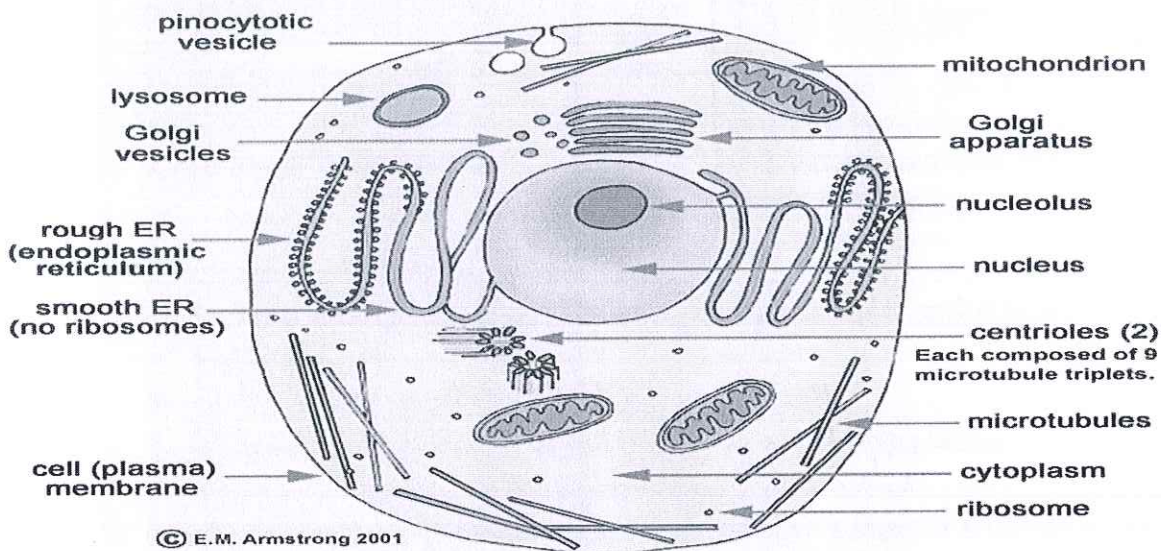
- c. Multicellular organisms grow by cell division where one single cell divides into two cells, and correspondingly into four, and so on.
- d. A fish swim by swishing their fins and tails.
- e. Joints found in animals are Hinge joint, Pivot joint, Ball and socket joint, fixed (any 3).
- f. Different types of meristematic tissue : Apical and lateral.
- g. Different types of epithelial tissue : Squamous, cubical/ cuboidal, columnar

Group C

6. Answer any 8:

5x8=40

a. Draw an animal cell and label its parts.



b.

Plant cell	Animal cell
(i) Rigid Cell wall made up of dead substances is present	(i) Cell wall is absent
(ii) Plastids are present	(ii) Plastids are absent
(iii) Centrioles are absent	(iii) Two centrioles are present
(iv) Large vacuoles are present	(iv) Vacuoles are mainly absent, if present they are small vacuoles

c. The premises of cell theory are-

1. Cell is a mass of protoplasm containing a nucleus and bounded by a cell membrane and/or cell wall
2. Living organisms are made up of one or more cells
3. Cells are the basic structural and functional unit of living beings
4. Every cell originates from a pre-existing cell by division

d. Mitochondria are called the powerhouse of cell as they produce enzymes which help in respiration and gives energy to the cell. It is essential for the respiratory process which ends with the release of energy following the breakdown of food. It is the mitochondria that stores the energy.

Plastids are found only in the plant cells. They are of three types-

1. Chloroplasts- it is responsible for producing food by performing photosynthesis by trapping the solar energy and then helping o convert carbon dioxide and water to carbohydrate. So not only plants but also other organisms depend on plants to fulfill their carbohydrate requirements.

2. Chromoplasts- they give colour to fruits and flowers, which attracts insects and helps in pollination.
 3. Leucoplast- these are responsible for storage of food like starch, proteins, and fats. They turn into chloroplasts when exposed to sunlight.
- e. Draw a neuron, labeling its parts

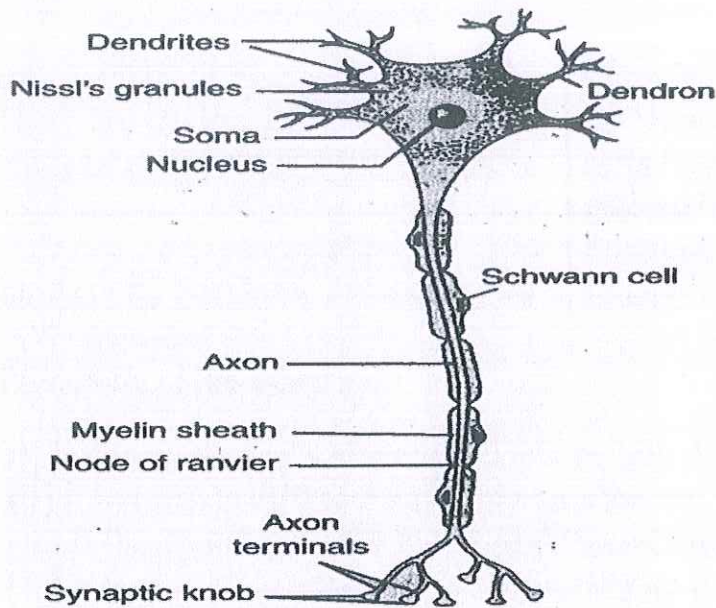


Fig. Structure of Neuron

4 +

f.

Simple permanent Tissue	Complex permanent Tissue
(i) These are the tissues which have only one type of cells having same origin.	(i) These are tissues that are made up of cells from different origin but collectively performing the same function.
Examples : Parenchyma, Sclerenchyma and Collenchyma	Example : Xylem and Phloem

g. Functions of the blood:

- (i) It transports gases like oxygen and carbon dioxide.
- (ii) It transports different excretory substances.
- (iii) It transports digested food and different nutrients in plasma.
- (iv) It is also responsible for our immunity as it protects us against infections.
- (v) Blood is also responsible for water balance of our body and regulates the body temperature.

h. Moveable joints are of 2 types- partially moveable joints and fully moveable joints.

1. Partially moveable joints are found in the vertebral column. They have restricted movement.
2. Fully moveable joints are of 3 kinds- pivot joints which are present in the neck, hinge joints present in elbow or knee and ball-and-socket joints present in the shoulder or hip.

i. Epithelial tissues are of the following types-

Types of epithelial tissue	Squamous epithelial tissue	Columnar epithelial tissues	Cuboidal epithelial tissues
Functions	This tissue provides protection against injury and facilitates diffusion	By increasing surface area they help in absorption and also help in secretion	Secretion and absorption

j. Draw and label a plant cell.

