

# BIOLOGY

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**TIME : 40 Minutes**

**Total Score : 20**

*Answer all questions from 1 to 3. Each question carries 1 score*

1. Find out the correct statement

- (a) Protoplasm is formed by all materials in the cell including cytoplasm and plasma membrane.
- (b) Protoplasm is formed by all materials inside the plasma membrane.
- (c) Protoplasm is cytoplasm inside the cell, except the nucleus.
- (d) Protoplasm and cytoplasm are same materials.

2. Complete the following

Atom → Molecule → ..... → Cell → Tissue

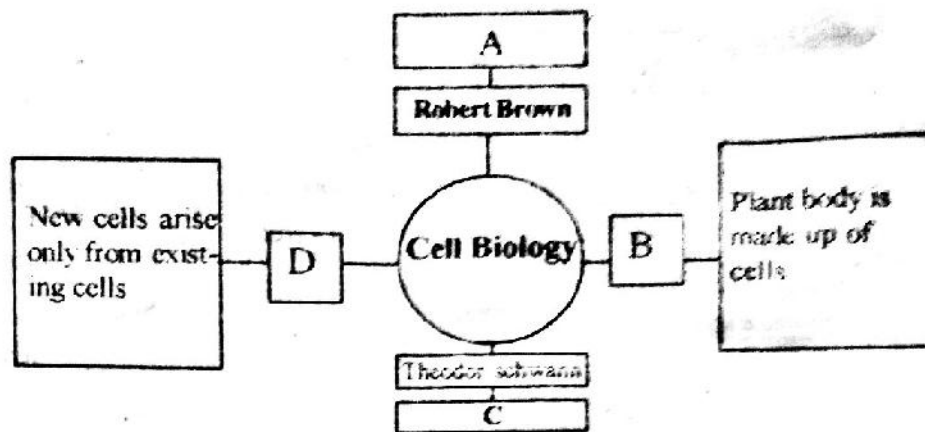
3. Some steps in preparing a plant section for microscopic observation are given below.

- (A) Keep the specimen in water for a while.
- (B) Add Glycerine to the section

Give reasons for the above actions.

Answer any 4 from questions 4 to 8. Each question carries 2 score.

4. Complete the following illustration.



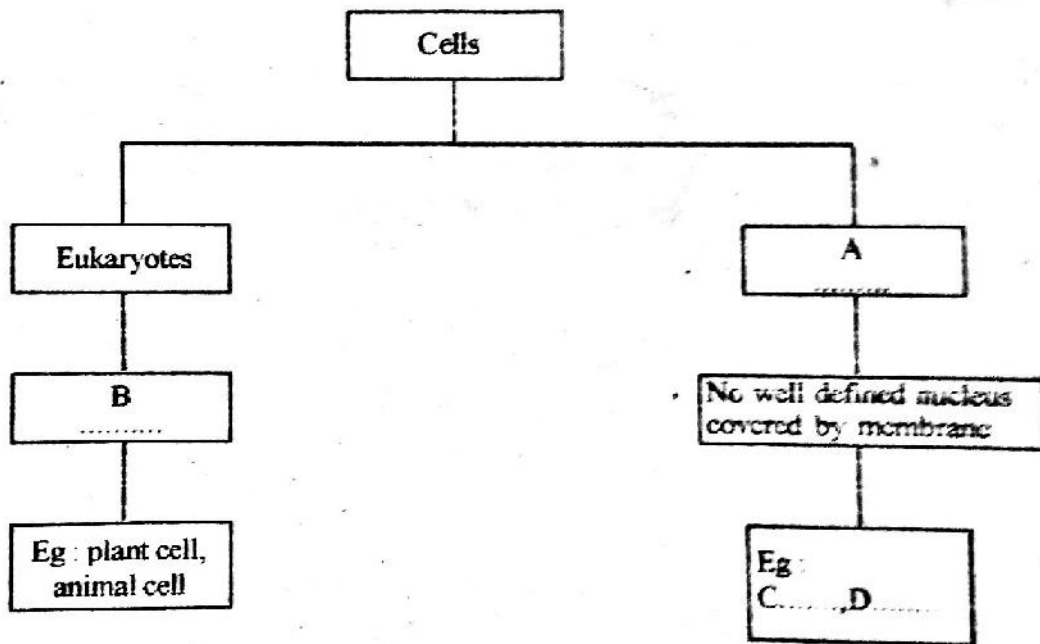
5. Which are the vascular tissues of plants? Write the function of each.

6. Write the use of the following parts in a compound microscope.

(a) Eye piece

(b) Plane mirror

7. Complete the concept map.



8. Specific cells found at the growing tips of plants help in plant growth.

a) Name these cells.

b) Write any two features of these cells.

Answer any 3 from questions 9 to 12. Each question carries 3 Score.

9 Re-arrange columns B and C according to column A.

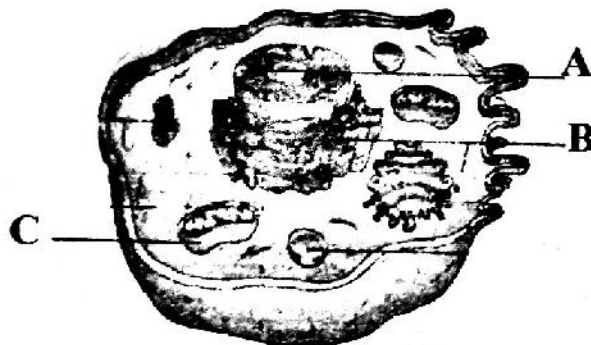
A	B	C
Sclerenchyma	<ul style="list-style-type: none"> <li>▪ Cells with simple structure</li> <li>▪ Cells are thick only at the corners</li> </ul>	<ul style="list-style-type: none"> <li>▪ Help in the conduction of water</li> </ul>
Parenchyma	<ul style="list-style-type: none"> <li>▪ Cells are uniformly thick all over the cell wall</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provides strength and support to the plant parts</li> </ul>
Collenchyma	<ul style="list-style-type: none"> <li>▪ Thin walled or thick walled cells</li> </ul>	<ul style="list-style-type: none"> <li>▪ Seen in the soft parts of plant</li> <li>▪ Provides flexibility and support to plant parts</li> </ul>

10. Cartilage and blood are connective tissues.

(a) Why the name "connective tissue" is given to them?

(b) Write another example for connective tissue. What is its function?

11. Observe the picture.



(a) Identify A, B and C.

(b) Write their functions.

12. Name the tissues that carry out the following functions.

(a) Covers and protect our body.

(b) Controls and co-ordinates physiological function.

(c) Enable the movement of the body.