Chapter 4

Cells and Tissues

TERMINOLOGY USED IN CHAPTER

THE TERMS TO KNOW

1. Active transport: The movement of molecules from an area of lower concentration to the area of higher concentration, with the expenditure of energy

2. Cell: The smallest living things, the basic unit of organization of all organisms

3. Cell membrane: A thin and elastic membrane covering the cytoplasm of all prokaryotic and eukaryotic cells

4. Cell theory: One of the most fundamental educations about cells, proposed by Schleiden and Schwann

5. Cell wall: The non-living and strong component of the cell, located outside the cell membrane, in plants, fungi, prokaryotes and many protists

6. Centriole: The hollow and cylindrical organelles present in the cells of animals and many unicellular organisms

7. Chloroplast: The green plastids found in plants and many protists; involved in photosynthesis

8. Chromoplast: The plastids with pigments of bright colors; present in flower petals, fruits etc.

9. Connective tissue: Animal tissue that supports and binds other tissues

10. Cytoplasm: The semi-viscous and semi-transparent substance present between the plasma membrane and the nuclear envelope

12. Endoplasmic reticulum: The network of channels that extends from plasma membrane to the nuclear envelope

13. Epithelial tissue: Animal tissue that covers the outside of the body and lines organs and cavities

14. Facilitated diffusion: The movement of the molecules from higher to lower concentration with the help of transport proteins

15. Golgi apparatus: The set of flattened sac-like structures called cisternae; found in animal and plant cells; involved in cell secretions

16. Hypertonic solution: The solution in which more solute is present

17. Hypotonic solution: The solution in which less solute is present

18. Isotonic solution: The solutions, which has equal concentrations of solutes

19. Leucoplast: The colorless plastids in the cells of those plant parts where food is stored

20. Lysosome: The single-membrane bound organelles having strong digestive enzymes

23. Mitochondrion: The double membrane-bounded structure in eukaryotes; involved in cellular respiration

24. Muscle tissue: Animal tissue composed by cells with ability to contract

25. Nucleus: The most prominent organelle in eukaryotic cell; controls al cell activities **26. Organelle:** The sub-cellular structures

27. Osmosis: The movement of water molecules from a solution of lesser solute concentration to a solution of higher solute concentration, across a semi-permeable membrane

28. Passive transport: The movement of materials without any expenditure of

29. **Phagocytosis:** The phenomenon in which cell takes in solid materials in bulk

30. **Pinocytosis**: The phenomenon in which cell takes in liquid materials in drops

31. **Plasmolysis**: The shrinking of cell due to loss of water

32. **Plastid**: The membrane-bound organelles in plants and many protists

33. **Ribosome**: Tiny granular structures in cell: either floating freely in the cytoplasm or bound to the endoplasmic reticulum, involved in protein synthesis

34. **Semi-permeable**: The structure that allows a very few molecules to cross it and checks the majority of molecules to cross

35. **Tissue**: The group of similar cells, performing the same job

36. **Turgor pressure**: The pressure of the internal water on cell wall

37. **Microfilament**: Part of the cytoskeleton; made of actin proteins

38. **Microtubule:** Part of the cytoskeleton: made of tubulin proteins

39. **Vacuole**: A fluid filled organelle, bounded by a single membrane