



INDIAN SCHOOL MUSCAT
SENIOR SECTION
DEPARTMENT OF BIOLOGY CLASS XI
CHAPTER 8 CELL – THE UNIT OF LIFE
WORKSHEET- 10

.....

I VERY SHORT ANSWER TYPE QUESTIONS

1. What is the significance of vacuole in a plant cell?
2. What does 'S' refer in a 70S & an 80S ribosome?
3. Mention a single membrane bound organelle which is rich in hydrolytic enzymes.
4. What are gas vacuoles? State their functions?
5. What is the function of a polysome?
6. What is referred to as satellite chromosome?

II SHORT ANSWER TYPE QUESTIONS

7. Discuss briefly the role of nucleolus in the cells actively involved in protein synthesis.
8. Explain the association of carbohydrate to the plasma membrane and its significance.
9. Comment on the cartwheel structure of centriole.
10. Briefly describe the cell theory.
11. Differentiate between Rough Endoplasmic Reticulum (RER) and Smooth Endoplasmic Reticulum (SER).
12. Endoplasmic Reticulum (SER).
13. Give the biochemical composition of plasma membrane. How are lipid molecules arranged in the membrane?
14. What are plasmids? Describe their role in bacteria?
15. What are histones? What are their functions?

III LONG ANSWER TYPE QUESTIONS

19. Eukaryotic cells have organelles which may
 - a. not be bound by a membrane
 - b. bound by a single membrane
 - c. bound by a double membrane

Group the various sub-cellular organelles into these three categories.

20. Justify the statement, "Mitochondria are power houses of the cell"

21. Is there a species specific or region specific type of plastids? How does one distinguish one from the other?

22. Write the functions of the following

- a. Centromere
- b. Cell wall
- c. Smooth ER
- d. Golgi Apparatus
- e. Centrioles

23. Are the different types of plastids interchangeable? If yes, give examples where they are getting converted from one type to another.

IV PRACTICE THE FOLLOWING DIAGRAMS

i) Plant cell

ii) Animal cell

III) Fluid Mosaic Model of Plasma membrane

iv) Longitudinal section of Mitochondria

v) Sectional view of Chloroplast

vi) Section of Flagella or Cilia

Vii) Structure of a nucleus