**Karan Arora** **R.L. Chemistry Classes M: 9253556635**

**Max Time : 1 hr** **Class = 9th Science Test Max Marks : 30**

**FUNDAMENTAL UNIT OF LIFE**

**[Upto Plasma Membrane and Transportation.]**

1. Multiple choice questions : [ 1 X 5 = 5]
2. Cell theory was given by :

|  |  |
| --- | --- |
| a) Schleiden and Schwann | b) Virchow |
| c) Hooke | d) Haeckel |

1. The only cell organelle seen in prokaryotic cell is :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Mitochondria | b) Ribosomes | c) Plastids | d) Lysosomes |

1. Living cell were discovered by :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Robert Hooke | b) Purkinje | c) Leeuwenhoek | d) Robert brown |

1. If a membrane allows passage of solvent freely but selects the passage of specific solute particles, it is called as :

|  |  |
| --- | --- |
| a) Impermeable | b) Permeable |
| c) Semi-permeable | d) Selectively permeable |

1. Fluid mosaic model was presented by :

|  |  |
| --- | --- |
| a) Singer and Nicolson (1972) | b) Danielli and Davson (1935) |
| c) Robertson (1959) | d) Robert brown (1858) |

Fill In the Blanks : [ 1 x 3 = 3 ]

1. Cells are the \_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_ units of all organisms.
2. Yeast, bacteria and all protists are examples of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ organisms, wherein a single cell constitutes the whole organism.
3. If a membrane allow penetration of only solvent molecules but not the solute particles, it is called \_\_\_\_\_\_\_\_\_\_\_\_\_.
4. Where are genes located? [ 1 ]
5. Define plasmolysis. [ 1 ]
6. What is nucleoid? [ 1 ]
7. Which cell organelle controls most of the activities of the cell? [ 1 ]
8. Why cell is called the structural and Fundamental unit of life? [ 2 ]
9. Differentiate between Unicellular and Multicellular Organisms. [ 2 ]
10. Define : (a) Hypertonic solution (b) Hypotonic solution [ 2 ]
11. Define (a) Passive transport (b) Active transport. [ 2 ]
12. Differentiate between Prokaryotic cell and Eukaryotic cell [ 2 ]
13. Explain how does CO2 and O2 moves in and out from the cell? [ 2 ]
14. What are the Postulates of Cell Theory? [ 3 ]
15. Draw a labelled diagram of plant cell and explain how it is different from animal cell? [ 3 ]