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

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

**FUNDAMENTAL UNIT OF LIFE**

**[Nucleus and Organelles]**

1. Multiple choice questions : [ 1 X 10 = 10 ]
2. Which cell organelle plays a crucial role in detoxifying many poisons and drugs in a cell?

|  |  |  |  |
| --- | --- | --- | --- |
| a) Golgi apparatus | b) Lysosomes | c) SER | d) Vacuoles |

1. Organelle without a cell membrane is :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Ribosomes | b) Golgi apparatus | c) chloroplast | d) Nucleus |

1. Which main light absorbing pigment is present in green plastids?

|  |  |  |  |
| --- | --- | --- | --- |
| a) Xanthophyll | b) Chlorophyll | c) Phycobilin | d) Carotenoids |

1. What is the energy currency of the cell?

|  |  |  |  |
| --- | --- | --- | --- |
| a) ADP | b) AMP | c) ATP | d) FAD |

1. How many daughter cells are formed in meiosis?

|  |  |  |  |
| --- | --- | --- | --- |
| a) 1 | b) 2 | c) 3 | d) 4 |

1. Chromosomes are made up of :

|  |  |  |  |
| --- | --- | --- | --- |
| a) DNA | b) Protein | c) DNA & protein | d) RNA |

1. The two arms of each chromosome are termed :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Chromatin fibres | b) Centromeres | c) Chromatids | d) None of these |

1. Organelle other than nucleus, containing DNA is :

|  |  |  |  |
| --- | --- | --- | --- |
| a) ER | b) Golgi apparatus | c) Mitochondria | d) Lysosome |

1. Lipid molecules in the cell are synthesized by :

|  |  |  |  |
| --- | --- | --- | --- |
| a) SER | b) RER | c) Golgi apparatus | d) Plastids |

1. Infolds of inner membrane of mitochondria in the matrix is :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Cristae | b) Stroma | c) lamellae | d) none of these |

1. 70 S types ribosomes are found in \_\_\_\_\_\_\_\_\_ cells and 80 S types ribosomes are found in \_\_\_\_\_\_\_\_\_\_\_ cells. [ 1 ]
2. Mitosis helps in \_\_\_\_\_\_\_\_\_\_\_ and repair of tissues by replacing old, worn out dead cells or injured cells in organisms [ 1 ]
3. Single membrane of vacuole is known as \_\_\_\_\_\_\_\_\_\_\_\_. [ 1 ]
4. If the organization of a cell is destroyed due to physical or chemical influence, what will happens? [ 1 ]
5. Differentiate between Smooth Endoplasmic Reticulum and Rough Endoplasmic Reticulum. [ 2 ]
6. Why Lysosomes called suicidal bad of the cell? [ 2 ]
7. Where are protein synthesis occur inside the cell? [ 2 ]
8. What would happens if the plasma membrane ruptures or break down? [ 2 ]
9. Which type of cell division required for : [ 2 ]
10. Growth and repair of body (b) Formation of gametes.
11. Draw labelled diagram of mitochondria. Write the functions of mitochondria. [ 3 ]
12. Write a note on Nucleus also define the following parts : [ 3 ]

(a) Nuclear membrane (b) Nucleoplasm (c) chromosome.