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**Max Time : 1 ½ hr** **Class = 11th Biology Test Max Marks : 50**

**Topic: Cell : Structure & Functions**

1. Multiple choice questions : [ 1 X 7 = 7]
2. The stage during which separation of paired homologous chromosomes begin is :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Diakinesis | b) Diplotene | c) Pachytene | d) Zygotene |

1. The leucoplasts that stores fat are called

|  |  |  |  |
| --- | --- | --- | --- |
| a) Amyloplasts | b) Elaioplasts | c) Alueroplasts | d) Proplastids |

1. The two subunits of ribosomes remain united at a critical ion level of

|  |  |  |  |
| --- | --- | --- | --- |
| a) Calcium | b) Copper | c) Manganese | d) Magnesium |

1. Identify the wrong statement about meiosis :

a) Pairing of homologous chromosomes

b) Four haploid cells are formed

c) At the ends of meiosis the chromosome number are reduced to half

d) Two cycle of DNA replication occurs

1. The structural frame work of bacterial cell wall is

|  |  |  |  |
| --- | --- | --- | --- |
| a) Cellulose | b) Chitin | c) Peptidoglycan | d) pseudomurein |

1. Lamin is

|  |  |
| --- | --- |
| a) Microtubule | b) Microfilament |
| c) Intermediate filament | d) None of these |

1. A chemical commonly used in inducing polyploidy is :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Colchicine | b) Exonucleases | c) Ephedrine | d) Reserpine |

**One mark questions [ 1 x 8 = 8 ]**

1. Define Dictyosomes?
2. Define passive and active transport?
3. Why mitosis is called equational division?
4. What is GO (Quiescent phase) of cell cycle?
5. Middle lamella is made up of …………………..
6. Modern cell theory is given by ?
7. A pair of centriole is called ……………………….

**Two marks questions [ 2 x 5 = 10 ]**

1. Distinguish between Euchromatin and Heterochromatin.
2. Differentiate between Rough endoplasmic reticulum & Smooth endoplasmic reticulum.
3. Draw the Haworth projection of glucose and deoxyribose.
4. Distinguish Metaphase of mitosis from Metaphase I of meiosis.
5. What is the significance of meiosis?

**Three marks questions [ 3 x 5 = 15 ]**

1. Define different type of chromosomes on the basis of position of centromere?
2. Distinguish between DNA and RNA.
3. (i) What are essential and non-essential amino acids.

(ii) Distinguish between Fibrous and globular proteins

1. Describe the events take place during interphase with well labelled diagram
2. (i) What are Cytoskeleton.

(ii) Draw the cartwheel structure of cilia and flagella and explain it in brief.

**Five marks questions [ 5 x 2 = 10 ]**

1. Describe the fluid mosaic model of plasma membrane with diagram.
2. (a) Explain the structure and functions of following organelles with the help of diagram:

(i) Mitochondria (ii) Golgi bodies (iii) Chloroplast