

**GRADE: X**

**TIME:**

**UNIT TEST -I**

**Biology**

**M.M:10**

**Instructions:** Read the question paper carefully. Write neatly and legibly. Do not over write. Pay special attention to spelling. Read the answers before submitting the answer sheet

**I. Multiple choice questions:**

**(2.5)**

- a) The term "chromosomes" literally means  
a) inherited bodies b) DNA and Histones c) Histones only d) Shining threads
- b) ..... are group of histones molecules surrounded by DNA strands  
a) Nucleosome b) Nuclear membrane c) Nucleus d) centromere
- c) During the pairing of chromosomes in meiosis, the chromosomes come to lie side by side.  
a) heterozygous b) homozygous c) homologous d) chaisma
- d) The basis of genetic variation in the living organisms during meiosis occurs due to  
a) cell division b) mutation c) crossing over d) karyokinesis
- e) Triple hydrogen bonds are present between  
a) Adenine & Thymine b) Adenine & Cytosine c) Adenine & Guanine d) Guanine & Cytosine

**III. Distinguish between:**

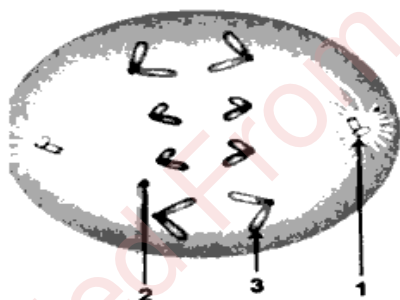
**(1.5)**

- i) Cytokinesis & Karyokinesis  
ii) Nucleosome & Nucleotide

**IV. a) Explain meiosis cell division with their significance.**

**(2)**

- b) i) Identify the stage Give a reason to support your answer. (2)  
ii) Name the parts labelled 1, 2 and 3.  
iii) Draw a neat labelled diagram of the cell as it would appear in the next stage. Name



the stage.

**V. Give reason:**

**(2)**

- i) The children of the same parents howsoever similar, are different from each other in certain aspects.  
ii) Gametes must be produced by meiosis for sexual reproduction.