



TEST PAPER: BIOLOGY

Time: 45 Minutes

Class: ICSE 10

Max. Marks: 30 Marks Date: 11th July 2018

Marking Scheme: Three questions carry 10 marks each. Questions have 3 subparts each. Subparts (a) and (b) carry 3 marks each and subpart (c) carries 4 marks.

Question 1:

- A. Define.
1. Centromere
 2. Aster
 3. Nucleosome
- B. Differentiate the following by giving two differences each:
1. Anaphase & metaphase.
 2. G1 & G2 phases.
 3. Mitosis & meiosis.
- C. Name the following.
1. Four nitrogenous bases that form 'rungs of DNA ladder'.
 2. DNA synthesis phase of a cell.
 3. Specific sequences of nucleotides on a chromosome.
 4. The phase in which chromosomes are attached to spindle fibers.
 5. Genetic recombination of between homologous chromosomes.

Question 2:

- A. Fill in the blanks:
1. _____ occurs in gametes reproduction.
 2. The separation of chromatids takes place in _____.
 3. DNA is made up of _____, _____ & _____.
 4. _____ are particular type of proteins present in chromosomes.
- B. Explain the following:
1. What is karyokinesis & cytokinesis?
 2. Explain different ways of cytokinesis in different organisms.
- C. Describe the following:
1. Why division of cells is necessary.
 2. Significance of meiosis.

Question 3:

- A. State true or false. Correct rewrite and the false ones.
1. Chromosomes are visible during last stage of interphase.
 2. Granules in a cell help in forming spindle fibers.
 3. Chromosomes duplicate in early prophase
- B. Give Reasons
1. Chromosome number gets halved in meiosis.
 2. Children of same parents are different from each other.
 3. Brain cells are not replaced.
- C. Answer the following:
1. Name these phases of mitosis.
 2. Describe what happens in first mitotic phase

