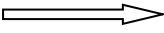


CLASS-10
Subject-BIOLOGY
Chapter-STRUCTURE OF CHROMOSOME & CELL DIVISION
ANSWER KEY

SHORT ANSWER TYPE:

1.
 - a) Chromosomes are rod shaped stained condensed bodies visible during cell division.
 - b) Centromere are disc shaped structure which joins two chromatids.
 - c) Nucleosome are a core of eight histone proteins which are wrapped by DNA.
2. Nucleotide is the repeating unit of DNA which is made of Nitrogenous bases, Deoxyribose sugar and phosphate group.
3. Alternate name of cell cycle is cell division cycle.
4. DEOXYRIBONUCLEIC ACID.
5. Arms of the chromosome is Chromatid and condensed form of chromatin fibre is Chromosome.
6. Nucleus.
7. Hydrogen bonds.

LONG ANSWER TYPE-

1. Molecular structure of DNA- i) 3dimensional double helix, ii)10 base pairs at each turn, iii)3'-5' end present, iv) presence of major and minor grooves, v)2 polynucleotide chain around the same axis.
2. Cell Cycle has INTERPHASE with G1,S and G2 phase in which the cell grows and matures &divisional phase in which depending on type of cell MITOSIS or MEIOSIS occurs.
3. In the Sphase of interphase in cell cycle DNA synthesis occurs and the amount of DNA is doubled. DNA replication also occurs causing increase in volume of DNA.
4. Double helix of DNA  Strands uncoil at one end to produce new strands against each parental strand



Each new DNA has one parental &one newly synthesized DNA.