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SUBJECT CODE NO:- B-2023
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. T.Y.(Sem-V) Examination Oct/Nov 2019
Botany Paper- XV
Cell Biology & Molecular Biology

[Time: 1:30 Hours]

[Max.Marks:50]

Please check whether you have got the right question paper.

- i) Attempt all questions.
- ii) Draw neat and well-Labeled diagram whenever necessary.

- Q.1 Describe structure and function of Lysosome 20
 OR
 What is Meiosis? Explain the process in detailed with its significance 20
- Q.2 Define giant Chromosome. Explain the structure of polytene and Lampbrush Chromosome 20
 OR
 Write Short note on (any four) 20
- a) Function of nucleus
 - b) Significance of mitosis
 - c) Duplication
 - d) Function of DNA
 - e) Endoplasmic Reticulum
 - f) Telomere
- Q.3 Multiple Choice Question 10
- 1) The term chromosome was coined by
 - a) W – Flemming
 - b) W – Roux
 - c) Walldeyer
 - d) Sutton
 - 2) Chromatin is composed of
 - a) DNA
 - b) DNA and Proteins
 - c) DNA, RNA and Proteins
 - d) None of these
 - 3) Which of the following does not contain phosphate
 - a) A nucleotide
 - b) Nucleotide
 - c) DNA
 - d) RNA
 - 4) In Cycle, DNA replication occurs during
 - a) G₁ phase
 - b) G₂ phase
 - c) Metaphase
 - d) S-Phase

- 5) Polytene Chromosomes were first observed by
 - a) Batanetzky – 1980
 - b) Heitz and Bauce – 1935
 - c) Balbiani – 1981
 - d) Steven Sand Wilson – 1905.

- 6) Centromere is a part of Chromosome which helps in the
 - a) Division of Centrosomes
 - b) Formation of Spindle fibres
 - c) Movement of Chromosomes
 - d) Formation of nuclear Spindle

- 7) The rough endoplasmic reticulum has -----Located on
 - a) Lysosome
 - b) Cytosol
 - c) Ribosome
 - d) Proteins

- 8) When DNA Polymerase is in contact with Guanine in the parental strand what does it add to the growing daughter strand
 - a) Phosphate
 - b) Cytosine
 - c) Uracil
 - d) Adenine

- 9) The 5' and 3' numbers are related to the
 - a) Length of DNA strand
 - b) Carbon number in Sugar
 - c) The number of prophase
 - d) The base pair rule

- 10) DNA Replication takes place in which direction?
 - a) 3' to 5'
 - b) 5' to 3'
 - c) Randomly
 - d) Vary from organism to organism