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SUBJECT CODE NO:- 6158
FACULTY OF SCIENCE AND TECHNOLOGY
M.Sc. (Sem-II)
Examination March/April-2022 (To be held in June/July-2022)
Zoology (Old)
Cell Biology -413

[Time: 3:45 Hours]

[Max.Marks:80]

Please check whether you have got the right question paper.

- N.B
1. Part A is compulsory.
 2. attempt any five question from Part B.
 3. Draw a neat labeled diagram wherever necessary.

PART- A

Q.1 Attempt the following multiple choice questions.

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1. Lysosome was discovered by _____.
 - a. De Duve
 - b. Robert Brown
 - c. Hooke
 - d. Robinson.
2. Enzymes involved in the oxidation of metabolic in prokaryotes _____.
 - a. Ribosome
 - b. Plasma Membrane
 - c. Nucleus
 - d. Nucliod
3. Chromosomes with equal arms are called as _____.
 - a. Submetacentric
 - b. Metacentric
 - c. Telocentric
 - d. Acrocentric
4. DNA replication in the cell division occurs at which stages _____.
 - a. G1 phase
 - b. S phase
 - c. G2 phase
 - d. M phase
5. Which of the following gene is involved in the conversion of proto-oncogene causing cancer _____.
 - a. Metastasis gene
 - b. Angiogenesis gene
 - c. Tumour suppressure gene
 - d. None of these
6. Cell theory is not applicable to _____.
 - a. Bacteria
 - b. Algae
 - c. Virus
 - d. Fungi
7. The main function of centrosome is _____.
 - a. Secretion
 - b. Osmoregulation
 - c. Protein synthesis
 - d. Formation of spindle fiber

8. Vesicles are transported from ER to the Golgi Complex apparatus along _____.
 - a. Microtubules
 - b. Intermediate filaments
 - c. Action filaments
 - d. None of them

9. Dye injected into an epithelial cell might be able to enter an adjacent cell through _____.
 - a. Tight junction
 - b. Microtubules
 - c. Desmosome
 - d. Gap junction

10. Paring of homologous chromosomes can be seen during _____.
 - a. Zygotene
 - b. Leptotene
 - c. Diplotene
 - d. Pachytene

PART- B

Attempt any five question following.

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| Q.2 | Describe the general organization of neuron. | 12 |
| Q.3 | Give an account of structural organization and function of ribosomes. | 12 |
| Q.4 | Write in detail account of polyethene chromosome. | 12 |
| Q.5 | What is cell signaling? Describe different pathways of signal transduction. | 12 |
| Q.6 | Explain in detail meiosis and their regulation. | 12 |
| Q.7 | Write in detail cancer and the cell cycle. | 12 |
| Q.8 | Describe the structure and function of antibody molecule. | 12 |