

**C. ABDUL HAKEEM COLLEGE (AUTONOMOUS),
MELVISHARAM - 632 509.
SEMESTER EXAMINATIONS, NOVEMBER – 2018**

M.Sc., ZOOLOGY **SEMESTER I**
P18MZL103 – CELL AND MOLECULAR BIOLOGY

Time: Three Hours

Maximum: 75 Marks

SECTION - A (5 X 6 = 30 Marks)

Answer ALL Questions.

1. a) Give a brief account of intercellular junctions of plasma membrane.

(Or)

b) Describe briefly about the biogenesis of mitochondria.

2. a) Give an account of cell fusion and heterokaryons.

(Or)

b) Give an account of polytene and lampbrush chromosomes.

3. a) Write a short essay on the regulation and synchronization of cell division.

(Or)

b) Differentiate between the normal and cancer cell.

4. a) Give an account of DNA repair mechanisms.

(Or)

b) Describe the chemistry of RNA.

5. a) Give an account of information transfer in prokaryotes.

(Or)

b) Write a short note on trimming of introns and splicing of exons in eukaryotes.

SECTION - B (3 X 15 = 45 Marks)
Answer ANY THREE Questions.

6. Give a detailed account of Mitochondrial energetics and control of cellular respiration.

7. Discuss the structure and functions of chromatin.

8. Give a detailed account of theories of carcinogenesis.

9. Write an essay on mechanism of DNA replication.

10. Discuss about information transfer in eukaryotes.
