

S.No. 317

17PAM03

(For the candidates admitted from 2017-2018 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2017.

First Semester

Applied Microbiology

CELL AND MOLECULAR BIOLOGY

Time : Three hours

Maximum : 75 marks

SECTION A — (5 × 5 = 25 marks)

Answer ALL the questions.

1. (a) Write short notes on cell wall structure of bacteria.

Or

- (b) Explain the structure of chloroplast.

2. (a) Write an account on cell cycle and its regulation.

Or

- (b) Briefly explain the enzyme linked receptors.



3. (a) Explain the structure of DNA.

Or

(b) Describe the Eukaryotic chromosome organization.

4. (a) Give an account on rolling circle model replication.

Or

(b) Explain the gene transfer mechanism in bacteria.

5. (a) Write short notes on Eukaryotic ribosomes.

Or

(b) Explain the post translation modification.

SECTION B — (5 × 10 = 50 marks)

Answer ALL the questions.

6. (a) Write an essay on structure and functions of plasma membrane.

Or

(b) Give a detailed account on partition coefficient.

7. (a) Write an account on mitosis cell division.

Or

(b) Explain in detail about the cell signaling.

8. (a) Write an essay on DNA repair mechanism.

Or

(b) Give a detailed account on DNA melting.

9. (a) Write an account on molecular events of Eukaryotic transcription.

Or

(b) Explain the basic rules of replication.

10. (a) Write an essay on Genetic code.

Or

(b) Explain the structure of Lac Operon model.