

APRIL/MAY 2018

**MAM11 — GENERAL MICROBIOLOGY AND
MICROBIAL PHYSIOLOGY**

Time : Three hours

Maximum : 75 marks

SECTION A — (5 × 6 = 30 marks)

Answer ALL questions.

1. (a) Briefly give the contributions of Louis Pasteur to microbiology.

Or

- (b) Write note on numerical taxonomy.

2. (a) Describe the gram staining method.

Or

- (b) Give an account on principle and applications of dark field microscope.

3. (a) Comment on enrichment culture technique

Or

- (b) Describe the various shapes of bacteria.

4. (a) Explain lysogenic cycle.

Or

- (b) Describe the various methods of dikaryotisation in basidiomycetes.

5. (a) Give concise account of glycolysis.

Or

- (b) Describe the structure of proteins.

SECTION B — (3 × 15 = 45 marks)

Answer any THREE questions.

6. Write about the spontaneous generation of life.

7. What is sterilization? Explain the radiation used in sterilization.

8. Draw and explain the gram positive and gram negative cell wall of bacteria.

9. Give an account of classification of bacteria based on Bergey's manual.

10. Write an essay on bioluminescence.