

120917488003

Code No. 3133

FACULTY OF SCIENCE

B.Sc. IV-Semester (CBCS) Examination, May / June 2019

Subject : Bio-Technology (DSC)

Paper - IV: Microbiology and Immunology

Time: 3 Hours

Max. Marks: 80

PART - A (5 x 4 = 20 Marks) (Short Answer Type) Note: Answer any FIVE of the following questions.

- Virulence and pathogenicity
- 2 Classification of microorganisms
- Moist heat sterilization 3
- Synchronous cultures
- 5 Carriers and adjuvants
- 6 Natural killer cells
- 7 Systemic lupus erythematosus
- 8 T-cell receptor

PART - B (4 x 15 = 60 Marks) (Essay Answer Type) Note: Answer ALL from the questions.

- 9 (a) Give the structure and general characteristics of micro-algae.

 - (b) Describe the instrumentation and working of Bright field and Dark field microscopy.
- 10 (a) What are the physical methods of sterilization? Give examples.

- (b) What are the various types of media used for cultivation of bacteria?
- 11 (a) What is adaptive immunity? Classify and explain.

- (b) What are the primary and secondary Organs of the immune system?
- 12 (a) Describe various types of Hypersensitivity reactions.

(b) Describe the production and applications of monoclonal antibodies.