## September-2007

[KR 231]

Sub. Code: 2976

M.Sc. (Non-Clinical) DEGREE EXAMINATION.

## Final

## Branch V — Microbiology

# Paper I — GENERAL BACTERIOLOGY AND IMMUNOLOGY

Time: Three hours

Maximum: 100 marks

Theory: Two hours and

Theory: 80 marks

forty minutes

M.C.Q.: Twenty minutes

M.C.Q.: 20 marks

## Answer ALL questions.

## I. Essay:

(1) Enumerate the various antigen-antibody reactions. Write a note on the different types of ELISA.

(20)

- (2) Discuss the structure and functions of porins of gram negative bacilli. (15)
- (3) Describe antigenic presenting cells and explain MHC restriction. (15)

II. Briefly describe the following:

 $(6 \times 5 = 30)$ 

- (a) Plasmids
- (b) DNA probes
- (c) Polymerase chain reaction
- (d) Natural killer cells
- (e) Anerobic culture techniques
- (f) Genetic recombination in bacteria.