09/09/25

Total Pages : 8

AB-234742

M.Sc. (Semester-II) Examination, June-2025

(Backlog)

MICROBIOLOGY

(Immunology)

Time Allowed : Three Hours

Maximum Marks : 70

Note : This question paper is divided into **four** sections. Attempt questions of **all four** sections as per direction. Distribution of marks is given in each section.

SECTION-A

(Objective Type Questions)

Note : Attempt **any ten** questions. Each question carries **1** mark. [10×1=10]

1. (A) Choose the correct option of the following :

(i) B-cells and T-cells are two types of cells involved in :

(a) Innate Immunity

(b) Active Immunity

(c) Passive Immunity

(d) Acquired Immunity

(ii) Which of the following immunoglobulins makes the largest percentage in breast milk?

(a) Ig M

(b) Ig D

(c) Ig G

(d) Ig A

(iii) Major Histocompatibility complex is a tight cluster of linked :

(a) Carbohydrates

(b) Proteins

(c) Genes

(d) Lipid molecules

(iv) Which of the following is not the function of an antibody?

(a) Lysis

(b) Neutralisation

(c) Assimilation

(d) Precipitation

(v) Which of the following is Not a type of method of transplantation?

(a) Autografting

(b) Allografting

(c) Xenografting

(d) Phenografting

(B) Fill in the blanks.

(vi) Any substance or molecules that interact with antibodies are called _____.

(vii) Full form of ELISA is _____.

(viii) The protein which catalyzes the proteolytic cleavage of the complement proteins is called _____.

(ix) _____ antibody is most commonly present in a hypersensitivity reaction.

(x) The BCG vaccine is administered for immunity against _____.

(xi) _____ immunity is present from our birth.

(xii) The causative of malaria is _____.

SECTION-B

(Very Short Answer Type Questions)

Note: Attempt **any five** questions. Each question carries **2** marks.(Word limit : **25-30** words) : [5×2=10]

2. (i) Define Immunogenicity.

(ii) What is Superantigen?

(iii) What is immunoglobulin?

(iv) What is MHC?

(v) Define Autoimmunity.

(vi) What is Hybridoma Technology?

(vii) What is humoral immune responses?

SECTION-C

(Short Answer Type Questions)

Note: Attempt **any five** questions. Each question carries **4** marks.(Word limit : **250** words) [5×4=20]

3. (i) Describe Innate and Acquired immunity.

(ii) Describe structure and function of antibody.

(iii) Describe major histocompatibility complex.

(iv) Describe Hypersensitivity.

(v) Describe immune response bacterial infection.

(vi) Describe vaccines.

(vii) Describe factors affecting immunogenicity.

SECTION-D

(Long Answer Type Questions)

Note: Attempt **any three** questions. Each question carries **10** marks.(Word limit : **500** words) [3×10=30]

4. (i) Describe cells and organs of immune system in detail.

(ii) Describe Immuno-techniques in detail.

(iii) Discuss generation of humoral and cell mediated immune responses.

(iv) Describe immune response during HIV infections in detail.

——x——