

C 21667

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Name.....

Reg. No.....

**SIXTH SEMESTER B.Sc. DEGREE (SUPPLEMENTARY/IMPROVEMENT)  
EXAMINATION, MARCH/APRIL 2017**

(UG—CCSS)

Microbiology

MB 6B 19—IMMUNOLOGY

Time : Three Hours

Maximum : 30 Weightage

**Part A**

*Answer all the **twelve** questions.*

*Each carries weightage  $\frac{1}{4}$ .*

Choose the correct answer :

- 1 Natural humoral immune response against a pathogen leads to the production of :  
(a) Polyclonal Abs. (b) Monoclonal Abs.  
(c) Macrophages. (d) Auto Abs.
- 2 Tetanus toxoid provides ———— immunity.  
(a) Passive. (b) Active.  
(c) Innate. (d) None of these.
- 3 The most abundant class of Ig is :  
(a) IgM. (b) IgG.  
(c) IgA. (d) IgE.
- 4 In an immune response the type of cell which gets activated earliest is ————.   
(a) Killer T cells. (b) Plasma cells.  
(c) Helper T cells. (d) Cytotoxic T cell.

Fill in the blanks

- 5 The incomplete antigen is called ————.
- 6 The BCG is an example for ———— vaccine.
- 7 The antigenic determinants is known as ————.
- 8 Widal test is used for the diagnosis of ———— disease.

**Turn over**

Expand the following :

- 9 MHC.
- 10 HGPRT.
- 11 VDRL.
- 12 NK cells.

(12 × ¼ = 3 weightage)

### Part B

*Answer all the **nine** questions in one **or** two sentences.  
Each carries weightage 1.*

Comment on the following :

- 13 Vaccines.
- 14 Complement system.
- 15 Dendritic cells.
- 16 MALT.
- 17 Types of ELISA.
- 18 Adjuvant.
- 19 Autoimmunity.
- 20 Inflammation.
- 21 Cytokines.

(9 × 1 = 9 weightage)

### Part C

*Write briefly on any **five** of the following.  
Each carries weightage 2.*

- 22 Immune complex diseases.
- 23 Clonal selection theory.
- 24 Macrophage and its functions.
- 25 GVH reactions.

- 26 Predisposing factors of antigenicity.
- 27 Describe the mechanism of type I hypersensitivity.
- 28 Production and applications of Monoclonal antibodies.

(5 × 2 = 10 weightage)

**Part D**

*Answer any **two** of the following.*

*Each carries weightage 4.*

- 29 Discuss the structure and functions of IgG with the help of a labelled diagram.
- 30 Define Immunity. Explain the different types of Immunity.
- 31 What are the different types of Antigen-Antibody reactions ? Write briefly on precipitation reactions and clinical applications.

(2 × 4 = 8 weightage)