

**SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, MARCH/APRIL 2016**

(UG—CCSS)

Core Course—Microbiology

MB 6B 19—IMMUNOLOGY

Time : Three Hours

Maximum : 30 Weightage

I. Answer all the *twelve* questions. Each carries **weightage**

Choose the correct answer :

1 Which of the following tests uses the specific antigen ?

- (a) **Widal.**
- (b) **VDRL.**
- (c) **Weil-Felix.**
- (d) **Paul Bunnel.**

2 T cell mediates which type hypersensitivity ?

- (a) **Type I.**
- (b) **Type II.**
- (c) **Type III.**
- (d) **Type IV.**

3 Local immunity is provided by :

- (a) **Ig M.**
- (b) **Ig G.**
- (c) **Ig A.**
- (d) **Ig D.**

4 An example for bacterial vaccine is :

- (a) **MMR.**
- (b) **DPT.**
- (c) **IPV.**
- (d) **All the three.**

Fill in the blanks :

5 Incomplete antigen is called \_\_\_\_\_

6 The **immunoglobulin** with valency 5 or 10 is \_\_\_\_\_

7 Antigenic determinant is otherwise known as \_\_\_\_\_

8 **Humoral** immunity is mediated by \_\_\_\_\_

Expand the following :

- 9 **ELISA.**
- 10 **NK cells.**
- 11 **VDRL.**
- 12 **HIV.**

(12 x = 3 weightage)

**Turn over**

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

Comment on the following :

- 13 Cytokines.
- 14 Haemagglutination.
- 15 Plasma cells.
- 16 Dendritic cells.
- 17 Widal test.
- 18 Latex agglutination.
- 19 Isoantigens.
- 20 Interferons.
- 21 Microphages.

(9 x 1 = 9 weightage)

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

- 22 Contact dermatitis.
- 23 Western blotting.
- 24 Phagocytosis.
- 25 Inflammation.
- 26 Classification of autoimmune diseases.
- 27 Pathology of serum sickness.
- 28 Monoclonal antibodies.

(5 x 2 = 10 weightage)

IV. Answer any *two* of the following. Each carries **weightage 4** :

- 29 Discuss the structure and functions of **immunoglobulins**.
- 30 Explain the cells and organs of immune system.
- 31 Describe different complement pathways.

(2 x 4 = 8 weightage)