

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, MARCH/APRIL 2015

(U.G–CCSS)

Core Course—Microbiology

MB 6B 19—IMMUNOLOGY

Time : Three Hours

Maximum : 30 Weightage

I. Answer all the *twelve* questions. Each carries **weightage** : $\frac{1}{4}$

Choose the correct answer :

1 Which test is used for the diagnosis of syphilis ?

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

2 **Ig E** 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 a live vaccine is :

- (a) **BCG.** (b) **TAB.**
(c) **OPV.** (d) All the three.

Fill in the blanks :

5 The process of engulfing foreign particles by a macrophage is called _____

6 The **immunoglobulin** which can cross the placenta is _____

7 Antigenic determinant is otherwise known as _____

8 **Hybridoma** technology is used for the production of _____**Turn over**

Expand the following :-

- 9 **GVH** reaction.
- 10 **BCG**.
- 11 **VDRL**.
- 12 **IPV**.

(12 x $\frac{1}{4}$ = 3 weightage)

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

Comment on the following :-

- 13 **Cytokines**.
- 14 Precipitation reaction.
- 15 Natural killer cells.
- 16 Coombs test.
- 17 Weil Felix test.
- 18 Reverse passive agglutination.
- 19 Organ specific antigens.
- 20 **Diapedesis**.
- 21 B lymphocytes.

(9 x 1 =9 weightage)

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

- 22 Delayed hypersensitivity.
- 23 **ELISA**.
- 24 **Phagocytic** cells.
- 25 Structure of Ig A.
- 26 Classification of hypersensitivity.
- 27 Pathology of Rheumatoid arthritis.
- 28 Monoclonal antibodies.

(5 x 2 = 10 weightage)

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

29 Discuss the different theories of immune response.

30 Explain the cells and organs of immune system.

31 Describe any four serological tests with their clinical applications.

(2 x 4 = 8 weightage)