

Total Page - 3

UG/5th Sem/Micro(H)/T/19

2019

B.Sc. (Honours)

5th Semester Examination

MICROBIOLOGY

Paper - C12T

(Immunology)

Full Marks : 40

Time : 2 Hours

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Group - A

1. Answer any *five* questions from the following.

5×2=10

- (a) Define interferon.
- (b) Mention two applications of monoclonal antibodies.
- (c) What do you mean by hypersensitivity reaction ?

[Turn Over]

(2)

- (d) Give examples of natural active and natural passive immunity.
- (e) Differentiate between antibody affinity and avidity.
- (f) What is opsonization ?
- (g) What is radial diffusion ?
- (h) What are adjuvants ? Give examples.

Group - B

2. Answer any *four* questions from the following.

4×5=20

- (a) Define antigens. State their characteristics. 2+3
- (b) Diagrammatically describe the single-immunodiffusion method of precipitation reaction.
- (c) Draw the structure of MHC-I molecule. Mention functions of it. 3+2
- (d) State the mechanisms of type I hypersensitive reaction. Mention two diseases caused by it. 3+2
- (e) Briefly describe the process of Indirect ELISA.
- (f) What is super antigen ? How it induces immune response in our body ? 1+4

(3)

Group - C

3. Answer any *one* question from the following.

1×10=10

- (a) Draw the schematic diagram of IgG molecule with proper labelling.

Describe the characteristic features and functions of IgG

What is the first immunoglobulin class produced in a primary response to an antigen ? 3+2+3+2

- (b) Diagrammatically describe cell-mediated immune responses.

What effects does thymectomy have on a neonatal mouse and on adult mouse ? 8+2
