

2009

MICROBIOLOGY

PAPER— VII

Full Marks : 40

Time : 2 hours

Answer any two questions from each Group

The figures in the right-hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Illustrate the answers wherever necessary

**Write the answers questions of each Group
in separate books**

GROUP—A

[Marks : 20]

Answer any two questions

1. (a) Describe the factors that increase susceptibility to infection.

(Turn Over)

(b) Discuss the stages in the progression of an infectious disease.

(c) How does pathogen adhere on the host cell surface? 3 + 5 + 2

2. (a) Describe the structure and function of IgG.

(b) Describe the gene arrangement and class switching of heavy chain during immunoglobulin formation. (4 + 2) + 4

3. Write short notes on (any four) : $2\frac{1}{2} \times 4$

(i) Inflammation

(ii) Fibrosis

(iii) Fungi induced melaninogenesis

(iv) Acute phase proteins (ACP)

(v) Oxygen dependent intracellular killing

(vi) Type-II hypersensitivity

(vii) Myasthenia gravis.

GROUP—B

[Marks: 20]

Answer any *two* questions

4. (a) Briefly describe how HIV attack, integrated and cause disease.
- (b) Write a brief note on Prion mentioning its importance. 5 + 5
5. (a) What is called one-step growth curve?
- (b) Write a brief note on interferon.
- (c) What is Metastasis?
- (d) How animal cell culture technique is used in detecting carcinogenic chemicals? 2 + 3 + 2 + 3
6. (a) Briefly describe two different routes of virus transmission among (i) plants, and (ii) animals.
- (b) Name five plant or animal viruses naming the host species of each. 5 + 5