

Roll No.

Total Pages : 2

BAM/A-20

569

BIOTECHNOLOGY

(Immunology and Animal Cell Biology)

Paper-II

Time : Three Hours]

[Maximum Marks : 45

Note : Attempt any *five* questions.

1. What are Immunoglobulins ? Discuss the salient features of different types of human immunoglobulins. 9
2. Describe briefly :
 - (a) Naturally acquired active immunity.
 - (b) Secondary lymphatic organs. (2×4½=9)
3. Distinguish between the following :
 - (a) Primary and Secondary cell culture.
 - (b) Primary and Secondary immune response. (2×4½=9)
4. Discuss the applications of Animal cell culture in
 - (a) Gene expression and Regulation studies. 5
 - (b) Production of proteins of medical importance. 4
5. (a) What are Cell lines ? How many categories of cell lines are available ? Discuss with examples. 5
(b) What are Selectable markers ? Explain. 4

6. Describe briefly :

(a) Hybridoma Technology.

(b) Cell Mediated Immune Response. (2×4½=9)

7. Write short notes on the following :

(a) Monolayer culture.

(b) Organ culture.

(c) Advantages of using established cell lines. (3×3=9)
