SS – 416

V Semester B.Sc. Examination, November/December 2018
(F+R/ CBCS)
BIOTECHNOLOGY – VI
Immunology and Animal Biotechnology

Time : 3 Hours Max. Marks : 70

***Instruction** : Draw a neat labelled diagrams **wherever** necessary.*

SECTION – A

I. Write short notes on the following **(5×2=10)**

1) Tissue extract
2) ELISA
3) HeLa cell lines
4) B-lymphocytes
5) Inflammation.

SECTION – B

II. Answer **any four** of the following : **(4×5=20)**

6) Differentiate between Humoral and cell mediated immunity.
7) Explain Electroporation method of gene transfer.
8) Describe the type III hypersensitive reaction with an example.
9) Write a note on Active and Passive immunisation.
10) Give an account on Mechanical method of Tissue Disaggregation.

SECTION – C

III. Answer **any three** of the following : **(3×10=30)**

11) Describe :
    a) Calcium phosphate mediated transfection.
    b) Primary cell culture.

P.T.O.

12) Define complement system. Explain the components and properties of classical complement system.

13) Give an account on :
   a) Transgenic sheep
   b) Barriers of innate immunity.

14) Explain HAT selection method in screening of hybrid cells.

15) What are antibodies ? Explain the structure and functions of IgM and IgG.

SECTION – D

IV. Answer the following : **(1×10=10)**

16) Define cell strain

17) Transgenic mice

18) Adjuvants

19) Plasma

20) Who discovered blood grouping in humans ?

21) Fibronectin

22) Opsonization

23) Expand HGPRT

24) Attenuation

25) Raft method.