



GN-281

101442

V Semester B.Sc. Examination, December - 2019
(CBCS) (F+R)

BIOTECHNOLOGY - VI
Immunology and Animal Biotechnology

Time : 3 Hours

Max. Marks : 70

Instruction : Draw neat labelled diagrams wherever necessary.

SECTION - A

I. Write short notes on the following :

5x2=10

1. Innate Immunity
2. Adjuvant
3. Toxoid
4. EGF
5. Plasma clot



SECTION - B

II. Answer **any four** of the following :

4x5=20

6. What is an antigen ? Explain the factors that influence antigenicity.
7. Give an account on chemically defined media.
8. What are vaccines ? Write a note on any two types of vaccines with a suitable example.
9. List out the differences between normal cell line and transformed cell line.
10. Write a note on monoclonal antibody production.

SECTION - C

III. Answer **any three** of the following :

3x10=30

11. Give an account on primary lymphoid organs of immune response.
12. Describe in detail, the expression vectors used in animal cell culture with a suitable example.
13. What is hypersensitivity ? Explain any three types of hypersensitivity in detail.
14. Define Antigen-Antibody reaction. Explain any four interactions in detail.
15. Give an account on :
(a) HGPRT (b) Transgenic animal

P.T.O.



SECTION - D

IV. Answer the following in a sentence or a word each :

10x1=10

- 16. Liposome
- 17. Cell line
- 18. B-lymphocyte
- 19. Expand ELISA
- 20. Antiserum
- 21. Atopy
- 22. Tuberculin
- 23. Confluency
- 24. Aminopterin
- 25. Cell receptor

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