



QP CODE: 24027471



24027471

Reg No :

Name :

**B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE
EXAMINATIONS, OCTOBER 2024**

Third Semester

B.Sc Botany and Biotechnology Model III Double Main

CORE COURSE - BO3CRT19 - IMMUNOLOGY

2017 Admission Onwards

AE70E302

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. What do you mean by paratope?
2. Name the antibody involved in allergy.
3. Write the importance of memory cells.
4. What are plasma cells?
5. Which auto immune disease involves antibodies produced against the basement membrane of glomerulus and alveolus?
6. Give two examples of type III hypersensitivity.
7. What are the stages of antigen-antibody reactions?
8. What is zone of equivalence in antigen-antibody reaction?
9. What is hyperacute rejection?
10. What is Bombay blood group?
11. What are DNA vaccines?
12. What are polyclonal antibodies?

(10×1=10)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*





13. Give a concise account of the types of immunity.
14. Give a detailed account on adaptive immunity.
15. Comment on the secondary lymphoid organs.
16. Describe cell-mediated immunity and their role in defense against infections.
17. Distinguish Class I and Class II MHC molecules.
18. Explain Sandwich ELISA.
19. What is immunocytochemistry?
20. Explain the types of genes that control cancer.
21. What are the applications of monoclonal antibodies?

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. What are complement proteins? Describe the sequence of events in which complement proteins are activated.
23. What is hematopoiesis? Give a detailed account on the different type of cells in immune system.
24. Give an account of diagnostic tests based on antigen-antibody reaction.
25. Write an essay on how the invention of vaccines helped the society.

(2×10=20)

