B.Sc. IV Semester (NEP) Degree Examination
ZOOLOGY
Gene Technology, Immunology and Computational Biology
Paper : DSC-4

Time : 2 Hours   Maximum Marks : 60

Instructions to Candidates:
1) All Sections are Compulsory.
2) Draw diagram wherever necessary.

SECTION-A

I.   Answer any Five of the following.   (5×2=10)

1. Define Endonucleases with example.
2. Define Gene Therapy.
3. What is Chemotherapy?
4. Acquired Immunity.
5. Function of FASTA.
6. Define mean with formula
7. What is Composite database.

SECTION-B

II.   Answer any Five of the following.   (5×4=20)

8. Write about Gene cloning vector - COSMIDs.
9. Applications of Monocloral bodies.
10. What is the role of lymph nodes in body defence.
11. Enumerate the uses of Vaccines.
12. Define Bioinformatics and add a note on its applications.
13. Give an account of properties of antigens.
14. Explain bar diagram

SECTION-C

III. Answer any Three of the following. (3×10=30)

15. Give an account of first line and second line of defence.

16. Write the function of different classes of immunoglobulins.

17. Explain gene silencing, knockout and knock in mouse.

18. The given table shows the scores obtained by different players in a Match. Calculate the Mean and median of the following data.

S.No	Name	Score
1	Sachin	80
2.	Yuvraj	52
3.	Virat	40
4.	Sehwag	52
5.	Rohit	70
6.	Dhoni	16
7.	Harbhajan	6