

2RS46165 THREE YEAR B.SC(CBCS) DEGREE EXAMINATION
FOURTH SEMESTER JUNE 2023
ZOOLOGY

**Paper- V- IMMUNOLOGY AND ANIMAL BIOTECHNOLOGY
MODEL PAPER**

Time: 3 Hrs

Marks: 75 marks

Section-A

5 X 5 = 25 Marks

**Answer Any Five Questions
Each question carries 5 Marks**

1. Vaccines
2. Lymph nodes
3. Antigen
4. MHC
5. Cryo preservation
6. IVF
7. Monoclonal antibodies
8. Monoculture in fishes

Section-B

10 X 5 = 50 Marks

Answer any Five of the following

Each question carries 10 Marks

9(a) write about the types of immunity .

(OR)

(b) Explain various cells of immune system.

10 (a) Explain the various factors influencing the immune system .

(OR)

(b) Explain the various types of hypersensitivities.

11(a) Explain the following

- a. primary cell culture
- b. secondary cell culture
- c. continuous cell culture

(OR)

(b) what are stem cells? Explain the applications of stem cells .

12(a) Explain about cloning vectors.

(OR)

(b)what are transgenic animals ? Explain the methods of transgenic animals and their applications.

13(a)Write a method involved in sanger's method of DNA sequence.

(OR)

(b)Describe DNA fingerprint protocol and a note on its uses.