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**24-ZO-24**

**M.Sc. II SEMESTER [MAIN/ATKT] EXAMINATION  
JUNE - JULY 2024**

**ZOOLOGY**

Paper - IV

**[Molecular Cell Biology and Genetics]**

*[Max. Marks : 75]*

*[Time : 3:00 Hrs.]*

*[Min. Marks : 26]*

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**Note :** Candidate should write his/her Roll Number at the prescribed space on the question paper.  
Student should not write anything on question paper.  
Attempt five questions. Each question carries an internal choice.  
Each question carries **15 marks**.

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**Q. 1** Describe transportation of proteins through Golgi and Post translational modification. (15 Marks)

**OR**

Describe the transport across the membrane with suitable example. (15 Marks)

**Q. 2** How do cell surface receptors work ? (15 Marks)

**OR**

Write an essay on Integrins. (15 Marks)

**Q. 3** Describe calcium dependent hemophilic cell-cell adhesion. (15 Marks)

**OR**

Describe the chromosomal organization of genes. (15 Marks)

**Q. 4** Write an essay on transgenic animals and its applications. (15 Marks)

**OR**

What do you mean by dosage compensation ? (15 Marks)

**Q. 5** Describe genetic disorder and human gene therapy. (15 Marks)

**OR**

Write an essay on gene libraries. (15 Marks)