



# VIT

Vellore Institute of Technology

(Deemed to be University under section 3 of UGC Act 1956)

**SCHOOL OF BIO SCIENCES AND TECHNOLOGY**  
**CONTINUOUS ASSESSMENT TEST -2**  
**WINTER SEMESTER 2024-2025**

**Programme Name & Branch** : M.Sc. Biotechnology (5 Year)  
**Course Code** : TBIT309L  
**Course Name** : Medical Biotechnology  
**Slot** : G1+TG1  
**Faculty Name(s)** : Dr. M.Kavitha  
**Class Number(s)** : VL2024250502337  
**Date of Examination** : 22.03.25  
**Exam Duration** : 90 minutes  
**Maximum Marks** : 50

**General instruction(s):**

- Answer all questions
- Draw diagram and insert table if necessary

| Q. No | Question                                                                                                                                                                                                      | Marks | Course Outcome (CO) | Bloom's Taxonomy (BL) |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---------------------|-----------------------|
| 1.    | Critically evaluate and categorize the risk factors responsible for the occurrence of breast cancer.                                                                                                          | 10    | 2                   | 4                     |
| 2.    | Which is the most common type of Diabetes mellitus? List out the causes and complications.                                                                                                                    | 10    | 2                   | 3                     |
| 3.    | Enlist the most common experimental applications of the following animal models.<br>a). Mice<br>b). Rabbit<br>c). Primates<br>d). Transgenic mice                                                             | 10    | 3                   | 3                     |
| 4.    | The clinical symptoms of this type of hypersensitivity reaction occur within 30 minutes and range from mild skin rashes to major systemic shock. Sketch the pathological mechanism of this allergic reaction. | 10    | 3                   | 4                     |
| 5.    | Write a brief note on the following HIV genes.<br>a). gag<br>b). env<br>c). pol<br>d). rev and rre                                                                                                            | 10    | 4                   | 3                     |