



VIT[®]

Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

REG.NO.: 24BN70014

SCHOOL OF HEALTHCARE SCIENCE AND ENGINEERING
CONTINUOUS ASSESSMENT TEST -I
FALL SEMESTER 2025-2026

SLOT: G1+TG1

Programme Name & Branch : B. Tech-Health Sciences & Technology
Course Code : BHST301L
Course Name : Cell and Molecular Biology
Faculty Name(s) : Dr. Arunkumar P
Class Number(s) : VL2025260100967
Date of Examination : 23.08.2025
Exam Duration : 90 minutes

Maximum Marks: 50

General instruction(s):

- **Answer All Questions**

Q. No	Question	Marks
1.	Compare the biological processes of Mitosis and Meiosis in mammalian cells.	10
2.	Justify how Watson and Crick predicted the structure of DNA.	10
3.	a. Draw and label the mechanism of the Intrinsic Apoptosis pathway.	5+5
	b. Draw and label the mechanism of the Extrinsic Apoptosis pathway.	
4.	a. Identify and draw this 5-residue peptide P-E-N-S-A.	5+5
	b. Differentiate hydrogen bonds and covalent bonds in proteins.	
5.	Discuss the types and functions of ribonucleic acid in detail.	10