



VIT

Vellore Institute of Technology
(Chartered as an Institution under section 3 of UGC Act, 1956)

REG.NO.: 24BML0072

SCHOOL OF CHEMICAL ENGINEERING
CONTINUOUS ASSESSMENT TEST -I
FALL SEMESTER 2025-2026

SLOT: A1

Programme Name & Branch : B.Tech.
Course Code : BBMD101L
Course Name : Anatomy and Physiology
Faculty Name(s) : Subhathirai S P
Class Number(s) : VL2025260103532
Date of Examination : 17-08-2025
Exam Duration : 90 minutes

Maximum Marks: 50

General instruction(s):

- Draw diagrams wherever required

Q. No	Question	Marks
1.	Discuss how epithelial cells at various anatomical locations contribute to the formation of selective blood-tissue barriers.	10
2.	Analyze the relationship between structure and function in specialized human cells by selecting any two distinct cell types. How do their unique morphological adaptations facilitate efficient performance of their physiological roles.	10
3.	a) Compare and analyze the structural and functional differences between the two types of circulation. (5 marks) b) Evaluate the consequences of an imbalance in one or more WBC types. (5 marks)	10
4.	a) Evaluate the structural and functional differences among the four major heart valves (5 marks) b) Using a labelled diagram, describe the sequence of electrical events during one cardiac cycle. (5 marks)	10
5.	Apply your knowledge of the structure and function of the central nervous system (CNS) to create a comprehensive model that demonstrates how the brain and spinal cord coordinate to regulate body functions and maintain homeostasis.	10
