

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATION- 2025

B.Tech-VII Semester (BT/BI)

COURSE CODE (CREDITS): 14BIWBT739 (3)

MAX. MARKS: 25

COURSE NAME: Stem Cell and Regenerative Medicine

COURSE INSTRUCTORS: Dr. Udayabanu

MAX. TIME: 1 Hour 30 min

Note: (a) All questions are compulsory.

(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

Q.No	Question	CO	Marks
Q1	Neuroglia are the supporting cells for neurons. Summarize the types of neuroglial cells in the central nervous system and peripheral nervous system.	CO2	5
Q2	Demonstrate the developmental stages of adult hippocampal neurogenesis in the dentate gyrus of rodent brain. List some markers representing the stage of neurogenesis.	CO3	5
Q3	Design an experimental study of isolate muscle derived stem cell. Discuss the isolation and characteristics of muscle derived stem cell.	CO3	5
Q4	With a neat diagram state the different types of cells present in islets of Langerhans and their function.	CO2	5
Q5	Demonstrate the advantages and unique properties of polymeric scaffolds.	CO5	5