

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATION- 2024

M.Tech-I Semester (CSE/IT/ECE/CE/BT/BI)

COURSE CODE (CREDITS):13M11BT111 (3)

MAX. MARKS: 25

COURSE NAME: Advances in Molecular Cell Biology

COURSE INSTRUCTORS: Dr. Udayabanu

MAX. TIME: 1 Hour 30 Minutes

**Note:** (a) All questions are compulsory.

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

Q.No	Question	Marks
Q1	Construct a transduction pathway and summarize the role of different proteins involved in a general signaling cascade	5
Q2	Some of the most interesting molecular events in RNA metabolism occur during this postsynthetic processing. Elaborate and distinguish the splicing mechanism of group 1 and group 2 introns.	5
Q3	Protein translation and elongation is complex and requires a number of factors for the initiation. Justify	5
Q4	Differentiate prokaryotic and eukaryotic transcription process and describe each transcription component of eukaryotes and its contribution in the process of transcription.	5
Q5	Assess the effect of exogenous alkylating and cross linking agents on DNA damage and repair.	5