



VIT

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

School of Bio Sciences and Technology

Fall Semester 2024- 2025

Continuous Assessment Test – II

Programme Name & Branch

B. Tech. Biotechnology

Course Name & code:

CELL BIOLOGY AND GENETICS & BBIT204L

Class Number (s):

VL2024250104091 & VL2024250104096

Slot :

B1+TB1

Faculty Name (s):

C. Rajasekaran & Trupti Patel

(Mention all the faculty names handling this subject for common course)

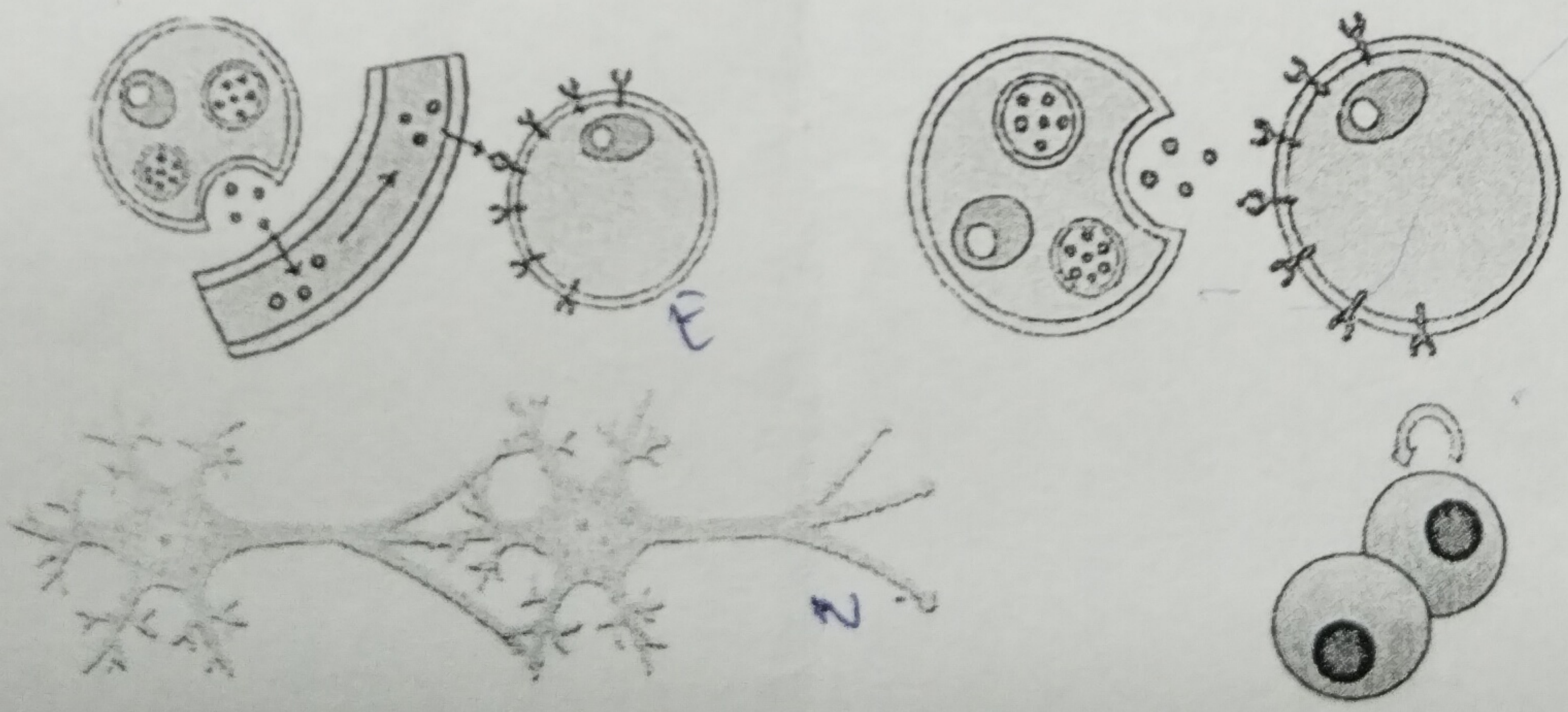
Exam Duration: 90 Min.

Maximum Marks: 50

General instruction(s):

Answer all the questions

Draw neat diagram wherever necessary

Q. No.	Question	Max Marks
1.	Starch is broken down into simple carbohydrates in the digestive system. What type of simple carbohydrate is found in our blood stream? How it is transported from small intestine to blood? Describe various methods of simple carbohydrate transport with suitable examples.	10
2.	Explain the following: a. Specific trans membrane proteins in the cell membrane undergo conformational change in transportation of solutes and big molecules, which is called as <u>T_1</u> or <u>T_2</u> . Mention its role in transport. (5m) b. ^{end} A foreign particle reaches the cellular membrane. Which different transport systems help it to enter the cell? (5m)	10
3.	Name the various types of cell signaling shown here and write a brief summary on each: 	10
4.	Excess of glucose found in the liver is converted to _____. How this signaling process in adipose cells is influenced by increased and decreased levels of second messenger– Explain in detail.	10
5.	William Bateson and Reginald Punnett in 1909 had observed deviations from Mendelian laws. It is known as _____. Explain any two Mendelian deviations with suitable examples.	10