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GIET UNIVERSITY, GUNUPUR - 765022
M. Sc. (First Semester) Regular Examinations, February - 2024
22LSPC102 - Cell Biology and Genetics
(Life Science)

Time: 3 hrs

Maximum: 70 Marks

(The figures in the right-hand margin indicate marks.)

PART - A**(2 x 10 = 20 Marks)**Q.1. Answer **ALL** questions

	CO #	Blooms Level
a. Define endospore.	C03	K3
b. Differentiate between animal cell and plant cell.	C03	K2
c. What is law of segregation?	C04	K2
d. How many gametes will be formed in case of genotype AABbCc.	C02	K4
e. Why G1 phase is known as quiescent phase?	C04	K3
f. What do you mean by secondary messenger?	C04	K3
g. Name few enzymes present in lysosome.	C01	K2
h. What is the role of LPS in bcateria?	C02	K3
i. What are the various ways by which mutation can occur?	C01	K4
j. Describe about secondary messenger.	C02	K3

PART - B**(10 x 5 = 50 Marks)**Answer ANY FIVE questions

	Marks	CO #	Blooms Level
2. a. Describe RTK pathway.	5	C02	K2
b. Describe with suitable example of endocrine signalling	5	C03	K3
3.a. Mention how protein is transported to lysosome via Golgi apparatus.	5	C03	K2
b. Write a note on gas vesicles.	5	C01	K3
4. Discuss the transport of protein in mitochondria.	10	C03	K2
5.a. Discuss on hardy Weinberg Law.	5	C04	K3
b. Write a note on cell junction.	5	C01	K4
6. Mention how protein is transported to lysosome via Golgi apparatus.	10	C04	K3
7.a. Write a note on chloroplast and its nucleus.	5	C02	K3
b. Write a note on gene interaction.	5	C04	K3
8. Discuss about the laws of father of genetics with suitable examples.	10	C04	K2