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GIET UNIVERSITY, GUNUPUR - 765022
M. Sc. (First Semester) Regular Examinations, February - 2024
22BTPC103 - Plant and Animal Biotechnology
(Biotechnology)

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 <i>ALL</i> questions	CO #	Blooms Level
a. What is organogenesis?	CO1	K2
b. Define electrofusion.	CO1	K2
c. What do you mean by continuous cell lines?	CO1	K1
d. Explain marker-free gene transfer.	CO2	K3
e. What is a binary vector?	CO2	K2
f. Define cybrid.	CO2	K4
g. What is attenuation in vaccine production?	CO3	K3
h. What do you mean by southern blotting?	CO3	K2
i. Define RAPD.	CO4	K2
j. What is BT cotton?	CO4	K4

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

	Marks	CO #	Blooms Level
2. a. Write briefly on sterilization techniques.	5	CO1	K1
b. Explain shortly on synthetic seed production.	5	CO1	K3
3.a. Describe two direct gene transfer techniques.	5	CO1	K2
b. Write on structure and importance of Ti plasmids.	5	CO2	K4
4. a. Give an account of germplasm conservation techniques.	5	CO2	K3
b. Illustrate the applications of transgenic animal technology.	5	CO2	K2
5.a. Write the process somatic hybridization and its applications.	5	CO3	K1
b. Give an account of animal cloning with suitable examples.	5	CO3	K3
6. a. Describe how plant cell suspension culture is developed and its application.	5	CO3	K4
b. Write on recombinant approaches to vaccine production.	5	CO3	K2
7.a. Give an account of genomics and complexity genome.	5	CO4	K3
b. Write on methods of analysing genome at various levels.	5	CO4	K2
8. a. Describe DNA fingerprinting and applications.	5	CO4	K4
b. Write on detection of meat adulteration using DNA based methods.	5	CO4	K3

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