

--	--	--	--	--	--	--	--	--	--



## GIET UNIVERSITY, GUNUPUR – 765022

M. Tech ( First Semester – Regular) Examinations, June – 2021

### MPEBT 1043 – Animal Biotechnology

#### (Biotechnology)

Time: 2 hrs

Maximum: 50 Marks

The figures in the right hand margin indicate marks.

#### PART – A

(2 x 10 = 20 Marks)

Q1. Answer **ALL** questions

- What is Cell Cytotoxicity and how to measure it?
- Differentiate between expression vector and cloning vector.
- What is a nuclear transfer technique?
- What are the potential applications of cloned animals?
- Describe the purpose of trans genesis.
- Explain the role of microinjection in gene transfection.
- Name two genetically engineered hormones produced using genetic engineering procedures.
- Describe the role of cryopreservation in cell culture.
- Write a brief note on CPCSEA guidelines.
- What is the role Organ culture in tissue culture?

#### PART – B

(6 x 5 = 30 Marks)

Answer **ANY FIVE** questions

Marks

- Discuss the various Current Trends and Challenges of Isolation, Culture, and Functional Characterization of Human Embryonic Stem Cells. (6)
- Elaborate the role of Bioreactors in scaling up of animal cell culture. (6)
- Interpret the various Chemical and electrochemical gene transfection methods. (6)
- AstraZeneca's Covid-19 vaccine AZD1222 is an Adeno viral vectors, Enumerate the merits and demerits of adeno virus vaccine. (6)
- Outline the procedure of In-Vitro Fertilization. How it is prepared and the risks involved in it. (6)
- Discuss how the Transgenic Animals is used to Improve Human Health and Animal Production (6)
- Illustrate why Baculovirus is an attractive and convenient tool for use as a vaccine expression/delivery vector. (6)

--- End of Paper ---