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GIET UNIVERSITY, GUNUPUR – 765022
M. Sc (First Semester) Examinations, May – 2021
20BTPC103 – Plant and 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)**Q.1. Answer **ALL** questions

- What is plant cell Totipotency?
- Define suspension culture
- What is Ri plasmid?
- What is molecular pharming? How is it done?
- How are industrial enzymes produced?
- How can we conserve animals?
- What is genomics?
- How many genomic databases are in blast?
- What is DNA fingerprinting?
- What is QTLs?

PART – B**(6 x 5 = 30 Marks)**Answer **ANY FIVE** questions

Marks

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| 2. Explain the stages of somatic embryogenesis. | (6) |
| 3. How are cell cultures used in pharmaceutical research? | (6) |
| 4. What is embryo manipulation? How do you identify a transgenic animal? | (6) |
| 5. How endangered species can be conserved? | (6) |
| 6. How do you do a genome analysis? Which techniques are commonly used in genome sequencing? | (6) |
| 7. Give a brief note on forward genetics techniques | (6) |
| 8. Write the principles and applications of DNA finger printing | (6) |

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