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**GIET UNIVERSITY, GUNUPUR – 765022**

M. Sc (First Semester) Examinations, May – 2021

**20LSPC101 – CELL BIOLOGY AND GENETICS**

(Life Science)

Time: 2 hrs

Maximum: 50 Marks

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

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

Write short note on the following

- Prokaryotic cell
- Lysosome
- Adhesions
- Cellulose
- m RNA
- Pachytene
- Dihybrid cross
- Backcross
- Synapsis
- G-protein

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

Marks

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| 2. Explain the Eukaryotic cell with neat diagram.                        | (6) |
| 3. Describe the structure and function of flagella                       | (6) |
| 4. Distinguish between mitosis and meiosis                               | (6) |
| 5. Write an essay on dihybrid cross .                                    | (6) |
| 6. Explain the structure and function of endoplasmic reticulum.          | (6) |
| 7. Write the significance of Mutation                                    | (6) |
| 8. Describe the Principles of population genetics and Hardy-Weinberg Law | (6) |

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