# Raja N. L. Khan Women's College (Autonomous)

PG Sem-I End Examinations- 2022

Sub – Botany

## Paper – BOT 101 (MICROBIOLOGY) F.M- 40

### Group-A

1. Answer any four questions:

 $2 \times 4 = 8$ 

- i) What is Biofilm?
- ii) Define magnetosome.
- iii) Mention the functions of Capsule?
- iv) Mention two contributions of Louis Pasteur.
- v) What areprions?
- vi) What are hyperthermophiles? Give example.
- vii) Define Nod factors.
- viii) What is plasmid curing?

#### Group-B

2. Answer any four questions:

 $4 \times 4 = 16$ 

- i) Describe the three domain concept as per Woese classification.
- ii) Write short notes on F-Plasmid and R-Plasmid.
- iii) Write a short note on Latex agglutination test with diagram.
- iv) Write down microbial production of citric acid.
- v) What is synchronous culture? Mention its utility?
- vi) Mention the major events in nodule formation of Biological nitrogen fixation.

### Group-C

3. Answer any two questions:

 $8 \times 2 = 16$ 

- i) Describe the structure of cell wall of Gram positive and Gram negative bacteria with suitable diagrams.
- ii) Give a comparative account of different immunoglobins with diagram.
- iii) Write notes on a) virus induced cancer; b) Lysogenic regulation.
- iv) Demonstrate with proper diagram
  - a) F<sup>+</sup>X F<sup>-</sup> conjugation
  - b) Hfr X F conjugation
  - c) F'XF conjugation