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**NB—18—2023**

**FACULTY OF SCIENCE AND TECHNOLOGY**

**B.Sc. (First Year) (First Semester) EXAMINATION**

**NOVEMBER/DECEMBER, 2023**

**(New Course)**

**BIOTECHNOLOGY**

**(Microbiology-I)**

**(Wednesday, 6-12-2023)**

**Time : 10.00 a.m. to 1.00 p.m.**

*Time—3 Hours*

*Maximum Marks—75*

*N.B. :-* (i) Attempt *all* questions.

(ii) Illustrate your answers with suitably labelled diagrams, wherever necessary.

1. Describe in detail spontaneous generation ? Explain the Redi's experiment. 15

*Or*

(a) Write a short note on physiological significance of fermentation. 8

(b) Explain the Koch's postulates. 7

P.T.O.

2. Describe in detail food and dairy microbiology. 15

*Or*

(a) Write a short note on space microbiology. 8

(b) Write a short note on medical microbiology. 7

3. What is cytoplasmic inclusion ? Give any *two* examples of it along with function. 15

*Or*

(a) Write a short note on ribosome of bacteria. 8

(b) Write a short note on mesosome. 7

4. Describe in detail endospore and exospores with example. 15

*Or*

(a) What are the differences between Spore and Cyst. 8

(b) Write a short note on eukaryotic cell function. 7

5. Write short notes on any *three* out of four : 15

(a) Micrographia

(b) Agricultural Microbiology

(c) Nucleoid

(d) Golgi apparatus.