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NB—23—2023

FACULTY OF SCIENCE

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

NOVEMBER/DECEMBER, 2023

(New Course)

BIOTECHNOLOGY

(Microbiology–II)

(Thursday, 7-12-2023)

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

Time—Three Hours

Maximum Marks—75

N.B. :— (i) Attempt all questions.

(ii) All questions carry equal marks.

(iii) Draw well labelled diagrams wherever necessary.

1. Describe major and minor elements required for microbial growth. 15

Or

(i) Describe natural and synthetic media. 8

(ii) Describe active transport. 7

2. Define bacterial growth. Describe bacterial growth curve. 15

Or

(i) Describe continuous culture. 8

(ii) Describe synchronous culture. 7

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(2)

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3. Describe sterilization by radiation and filtration. 15

Or

(i) Describe autoclave. 8

(ii) Describe sterilization by osmotic pressure. 7

4. Describe alcohol and phenol as disinfectant. 15

Or

(i) Describe chemotherapeutic agents. 8

(ii) Describe pasteurization. 7

5. Write short notes on (any *three*) : 15

(i) Selective Media

(ii) Diauxic growth

(iii) Tyndallization

(iv) Aldehydes

(v) Osmosis.

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