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NA—95—2023

FACULTY OF SCIENCE AND TECHNOLOGY

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

NOVEMBER/DECEMBER, 2023

(New Course)

MICROBIOLOGY

Paper II

(Fundamentals of Microbiology)

(Wednesday, 20-12-2023)

Time : 10.00 a.m. to 12.00 noon

Time—Two Hours

Maximum Marks—40

N.B. :— (i) Attempt All questions.

(ii) Draw well labelled diagrams wherever necessary.

1. Define Microscope. Explain in detail principle, construction, ray diagram and applications of compound microscope. 15

Or

Write notes on :

- (a) Bacterial Flagella 8
- (b) Fimbriae and Pili. 7
2. Define Sterilization. Illustrate sterilization by autoclave with respect to construction, working and uses. 15

P.T.O.

WT

(2)

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Or

Write notes on :

- (a) Nutritional categories of microorganisms on the basis of carbon and energy sources. 8
- (b) Bacterial N, P and S requirements. 7
3. Write short notes on (any two) : 10
- (a) Transmission electron microscope
- (b) Bacterial capsule
- (c) Seitz filter
- (d) Growth factors.

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