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NA—86—2023

FACULTY OF SCIENCE AND TECHNOLOGY

B.Sc. (Third Year) (Sixth Semester) EXAMINATION

NOVEMBER/DECEMBER, 2023

(CBCS/New Pattern)

MICROBIOLOGY

Paper XV

(Pharmaceutical Microbiology)

(Monday, 18-12-2023)

Time : 10.00 a.m. to 12.00 noon

Time—2 Hours

Maximum Marks—40

N.B. :— (i) Attempt All questions.

(ii) Draw well labelled diagram wherever necessary.

1. Describe in detail the bioburden determination with reference to non-sterile products and microbial limit test. 15

Or

Write notes on :

- (a) Application of pharmaceutical microbiology. 8
- (b) Overview of pharmaceutical microbiology. 7

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(2)

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2. Explain in detail the chemical preservatives with their action. 15

Or

Write notes on :

(a) The manufacture and quality control of immune sera. 8

(b) Recombinant DNA technique in insulin manufacture. 7

3. Write short notes on (any two) : 10

(a) Microbiological tests useful for pharmaceutical sector.

(b) Objectionable and assessing risk microorganism determination.

(c) Sterilization procedures.

(d) Ophthalmic preparation as sterile pharmaceutical products.

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