

This question paper contains 2 printed pages]

**NA—85—2023**

**FACULTY OF SCIENCE AND TECHNOLOGY**

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

**NOVEMBER/DECEMBER, 2023**

**(CBCS/New Pattern)**

**MICROBIOLOGY**

**Paper XV**

**(Industrial Microbiology)**

**(Monday, 18-12-2023)**

**Time : 10.00 a.m. to 12.00 noon**

*Time—Two Hours*

*Maximum Marks—40*

*N.B. :— (i) Attempt all questions.*

*(ii) Represent your answers with suitable figures and examples wherever necessary.*

1. What is Screening ? Describe in detail methods of primary screening for industrially important microorganism. 15

*Or*

Write notes on :

(a) Scope and development of industrial microbiology. 8

(b) Tower fermenter. 7

2. Describe in detail cell disruption methods for primary isolation of fermentation product. 15

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( 2 )

NA—85—2023

Or

Write notes on :

- |     |                                  |    |
|-----|----------------------------------|----|
| (a) | Bioinsecticide production        | 8  |
| (b) | Production of fungal amylase.    | 7  |
| 3.  | Write short notes on (any two) : | 10 |
| (a) | Fed batch fermenter              |    |
| (b) | Batch sterilization              |    |
| (c) | Adsorption chromatography        |    |
| (d) | Uses of glutamic acid.           |    |

NA—85—2023

2