

Bankura University
B.Sc 5th Semester (Honours) Theory Examination,2021

SUB: Microbiology

Course ID: 52211

Course Code: SH/MCB/501/C-11

Course Title: Industrial Microbiology

Full Marks: 25

Time: 1h 15 min

The figures in the margin indicate full marks

UNIT-I

1. Answer *any five* of the following questions: (1X5 = 5)

- a) What is pasteurization?
- b) What is meant by enrichment media?
- c) What is inoculum?
- d) Write the meaning of the term 'biotransformation'.
- e) What does Hop do in beer preparation?
- f) What is Ajinomoto powder?
- g) Name one algal product used for whole cell immobilization.
- h) Which enzyme is used for the production of HFCS?

UNIT-II

2. Answer *any two* of the following questions: (5x2 = 10)

- a) Briefly describe different methods of microbial cell disruption.
- b) How quality of wine is deteriorated by bacteria.
- c) What is microbial strain? Write the methods of strain improvement for industrial production of amino acid. 1+4 = 5
- d) Write short notes on one of the following:
 - i. Filtration
 - ii. Centrifugation

UNIT-III

3. Answer *any one* of the following questions: (10x1 = 10)

- a) Why microbial enzymes are becoming important in industries? Write the role of amylase and protease in industries. 2+4+4
- b) Write the procedure of alcohol production using microorganisms. What is meant by solid state fermentation? 8+2