

BACHELOR OF SCIENCE (CBCS-2018 COURSE)
T. Y. B. Sc. Sem-VI :SUMMER- 2022
SUBJECT : MICROBIOLOGY : BIOTECHNOLOGY

Day : Thursday
Date : 7/7/2022

S-18488-2022

Time : 11:00 AM-02:00 PM
Max. Marks : 60

N.B.:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Draw neat and labeled diagram **WHEREVER** necessary.
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Q.1 Attempt **ANY TWO** of the following: [12]

- a) Discuss the production of Red wine.
- b) Explain the mechanism for the production of Distiller's Yeast.
- c) Discuss the surface culture method for the production of citric acid.

Q.2 Attempt **ANY TWO** of the following: [12]

- a) Write on "Alcohol Production".
- b) How is citric acid produced in an industrial scale?
- c) Discuss the production of an enzyme.

Q.3 Attempt **ANY TWO** of the following: [12]

- a) What is strain improvement? Discuss the protoplast fusion technique.
- b) Describe the chromatographic assay method for detection of fermented product.
- c) How are enzymes produced?

Q.4 Attempt **ANY THREE** of the following: [12]

- a) What is quality control? Discuss the principle and application of Ame's test.
- b) How are auxotrophic mutants used in strain improvement?
- c) Why is sterility test performed?
- d) Discuss the biochemistry of citric acid production.

Q.5 Write short notes on **ANY FIVE** of the following: [12]

- a) Types of amylases
- b) Diseases of wine
- c) Patents in India
- d) Allergy testing
- e) Types of wine

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