


RAN-2603000506038001
T.Y.B.Sc. (Sem. VI) Examination March - 2026
Bioscience (Microbiology) : BM-MJ-603 : Industrial Microbiology (Major - 3)
Time: 1 Hour]
[Total Marks: 25

સૂચના : / Instructions (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી. Fill up strictly the above details on your answer book. (2) Figures to the right indicate full marks of the question. (3) Draw neat and labeled diagrams whenever necessary.	Seat No.: <table border="1"> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table> Student's Signature						

Q. 1 Multiple choices Questions. MCQ (Any Five) (05)

- Which test/s is/are important and carried out during screening?
 - Checking for contamination
 - Checking for pH
 - Estimation of critical nutrients
 - All of the above
- _____ produced during stationary phase.
 - Primary metabolites
 - Secondary metabolite
 - Biomass
 - None
- Which of the following is not a Carbon source?
 - Blackstrap Molasses
 - Corn Molasses
 - Beet Molasses
 - Yeast extract
- Which fermenter contains Riser tube to introduce sterile air?
 - Batch fermenter
 - Continuous fermenter
 - Air-lift fermenter
 - Tower fermenter
- Which of the following metals is not used in construction of stainless steel fermenter?
 - Molybdenum
 - Chromium
 - Aluminum
 - Nickel
- What is acting as a key factor to determine initial product separation steps?
 - Physical and chemical properties
 - Concentration of product
 - Location of product
 - All of the above

Q. 2 Answer the followings questions. (Any Two) (10)

- Write a note on Major components of culture media.
- Write an introductory note about screening of amylase producing microbes.
- Describe the principle and types of filters used for filtration.

Q. 3 Write a detail account on amylase production by submerge & solid state fermentation. (10)
OR
Q. 3 Answer the following Questions. (10)

- Write a note on types of Fermenter.
- Describe in brief Major industrial products.