

Total No. of Questions :5]

SEAT No. :

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P695

[5217] - 301

T.Y.B.Sc.

BIOTECHNOLOGY

Bb-331: Microbial Biotechnology

(2013 Pattern) (Semester - III)

Time : 3 Hours]

[Max. Marks :80

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Draw neat labelled diagram wherever necessary.*
- 3) *Figure to the right indicate full marks.*

Q1) Answer all the following in 2-4 lines.

[20]

- a) Name any two scientist with their contribution in medical microbiology.
- b) What is respiratory quotient?
- c) State any two advantages of normal flora.
- d) What is meant by putrefaction?
- e) What is mastitis test?
- f) What is false presumptive test?
- g) Enlist two names of organisms used in preparation of biofertilizer with their role.
- h) Enlist four inhibitory substances present in food that inhibit the growth of organism.
- i) Define coagulation.
- j) What is sauerkraut?

Q2) Attempt the following questions (any 3)

[15]

- a) What are thermophiles? Explain adaptation in thermophiles.
- b) Explain the process of canning in detail

P.T.O.

- c) Describe the kinetics of growth in a batch culture.
- d) Explain with the help of neat labelled diagram an anaerobic digester

Q3) Write a short notes on (any 3) [15]

- a) Microbial polysaccharides.
- b) Types of pasteurization.
- c) IMViC Test.
- d) Wine production.

Q4) a) Describe various methods of cell immobilization. Add a note on its advantages & disadvantages. [8]

OR

What is food intoxication? Describe food intoxication by Aspergillus Flavus. [8]

- b) Enlist extrinsic & intrinsic factor responsible for food spoilage. Explain any two intrinsic factors in detail. [7]

OR

Describe in detail any two methods for grading of milk. [7]

Q5) Attempt any one of the following. [15]

- a) Describe the Tetanus with respect to
 - i) Causative agent
 - ii) Symptoms.
 - iii) Pathogenesis.
 - iv) Diagnosis
 - v) Treatment
- b) Explain various drinking water purification methods with suitable example. [15]

