

2022
B.Tech.
Sem. Sen.

Department of Food Technology Roll No.....
School of Interdisciplinary Sciences and Technology
Jamia Hamdard, New Delhi-110062
B. TECH FOOD TECHNOLOGY, End Semester Examination, 2023
Course Title – Food Fermentation & Biotechnology (BFTC- 503)

Time: 3 Hours

Max Marks 75

Section A (Answer all the questions)

15M

- Q1. a). What do you understand by central dogma of life? (2M) [CO1; PO4.5]
b). Explain the term “genetic Code.” (2M) [CO1; PO4.5]
c). Write a short note on natto. (2M) [CO3; PO4.8]
d). State difference between submerged & solid-state fermentation. (2M) [CO2; PO3.4]
e). Describe RDT. (2M) [CO1; PO4.6]
f). What are pickle defects? (2M) [CO3; PO4.5]
g). What is vinegar? (2M) [CO3; PO5.8]
h). alcoholic beverage is made from rice. (1M) [CO3; PO4.5]

Section B (Answer any five questions)

5*6=30M

- Q2. Describe nucleic acids, their types, structure, and role in living beings. (6M) [CO1; PO4.5]
Q3. Illustrate the Watson & Crick model of DNA with the help of well labelled diagram. (6M) [CO1; PO4.5,6]
Q4. Explain the processing of soy Sauce. (6M) [CO3; PO5.6]
Q5. What are secondary metabolites? Discuss the processing of any-one. (6M) [CO3; PO2.4,5]
Q6. Give an insight about the production and recovery of citric acid. (6M) [CO3; PO2.4,5]
Q7. Briefly describe the primary treatment of effluents. (6M) [CO2; PO3.4,5]
Q8. Explain the working of cylindro conical and cyclone column bioreactor with diagram. (6M) [CO2; PO2.3,4]
Q9. Discuss the production and applications of xanthum gum. (6M) [CO3; PO4.5]

Section C (Attempt any two questions)

2*15=30M

- Q10. What is replication? Discuss in detail the steps involved in replication in prokaryotes along with a suitable diagram. (15M) [CO1; PO5.6]
Q11. With a properly labelled diagram explain in detail the design, components & functions of a fermenter. (15M) [CO2; PO4.5,6]
Q12. Discuss in detail the microbial production of PUFA and its health benefits. (15M) [CO3; PO4]
Q13. What do you understand by the term “GM Foods”? Explain with the help of few examples and mention the concerns related to their consumption in India. (15M) [CO1; PO4.5,6]