

177

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATIONS- 2026

B.Tech-VI Semester (BT)

COURSE CODE (CREDITS):18B11BT612 (03)

MAX MARKS: 25

COURSE NAME: Food and Agricultural Biotechnology

COURSE INSTRUCTOR: Dr. Garlapati Vijay Kumar

MAX. TIME: 1 Hour 30 Min

Note: (a) All questions are compulsory.

(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

| Q.No | Question | CO | Marks |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------|
| Q1 | What are the different "market pull" and "technical push" driving forces to use biotechnological methods for flavour production? Write a note on "MSG" and "5' nucleotides" as flavour enhancers and potentiators.? | II | 5 |
| Q2 | Write about the three principal types of flavourings used in foods with suitable examples. How does "molecular distillation" differ from "countercurrent extraction" in the isolation of flavours? | II | 5 |
| Q3 | Differentiate the source and potential benefits of the functional components "proanthocyanidin", "lignans" and "lutein". Summarise the different methods used to enhance the active components in food? | I | 5 |
| Q4 | How do the desirable properties of "probiotics" differ from those of "prebiotics"? Explain the probable mechanisms of probiotics. in "Cholesterol assimilation" and "Anticancerous effects"? | III | 5 |
| Q5 | List out the established desired changes brought about by the introduction of starter cultures in foods? Explain in detail about how DVS cultures contribute cost savings over bulk starter cultures in the case of starter culture technology? | III | 5 |

@@@@@@@@@@@@@@@@ ALL THE BEST @@@@@@@@@@@@@@@@@@