JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT TEST -2 EXAMINATION- APRIL-2023

B.Tech-6th Sem (BT)

COURSE CODE(CREDITS):18B11BT612

MAX. MARKS: 25

COURSE NAME: Food & Agricultural Biotechnology

COURSE INSTRUCTORS: Dr Hemant Sood

MAX. TIME: Ihour 30 minutes

Note: All questions are compulsory. Marks are indicated against each question in square brackets.

Q1. Which components of nutraceuticals played important role in cancer treatments? How its absorption and digestion carried out? (CO1) (3)

- Q2. For carrying out the pasteurization of foods only sterilization is not alone required. Explain this statement by demonstrating the pasteurization of milk at a commercial scale and complete protocol for maintaining its nutrient value also. (CO2) (4)
- Q3. Why biotechnological interventions are required for the production of disease-free papaya? Why conventional methods are not able to produce the desired crops? Conceptualize a methodology for its large-scale production. (CO3) (4)
- Q4. How canning of pineapple will be carried out? Explain the role of freezing techniques for its long-term storage. Which risk factors should be abstained for quality assurance of the products during storage? (CO4) (4)
- Q5. Which are the most desirable nutraceuticals consumed for antioxidant activity? Explain with examples for any two commercial products, along with their different functionalities and sources of extraction. (CO2)(4)

Q6.Explain the reasoning:

- A) Which chemical preservative would be most useful for food storage and why?
- B) Do you think synbiotics are having health benefits? How?
- C) Which type of Yeast is most useful for flavor development in fermented products? (CO1&2) (6)