

Dr. Jata Shankar.

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
TEST -3 EXAMINATION, DECEMBER 2018

B.Tech (Biotechnology) 4th year

Course Code: 14M1WBT331

MAX. MARKS: 35

Course Name: Food Processing & Engineering

Course Credits: 03

MAX. TIME: 2 Hr

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means. Marks are indicated in square brackets against each question

Q1. Write notes on the followings; a. Antihypertensive peptide b. Antioxidants c. Dietary fiber d. Flavanoids e. Starter culture (7.5 marks, each 1.5)

Q2. Define bioactive peptides and their properties? What are the different health benefits? How these bioactive peptides are isolated or obtained? (3.5)

Q3. What do you mean by food-nanotechnology? Write the different approaches in food nanotechnology with examples? (3.5)

Q4. Functional foods are health promoting foods or specific type of compounds with known health benefits. Give example of known fatty acids that helps to reduce cardiovascular related health problem or they inhibit the growth and proliferation of cancerous cells? (3.5)

Q5. What is importance of material transport and handling equipments in food industry? Enlist material handling equipments and discuss, design, working of food industry specific application of any two of following' a. Belt and Roller conveyers b. Bucket elevators c. Screw conveyer and feeder (5 marks; 1+1+1.5+1.5)

Q6. What is role of drying in food industry? Discuss design, operation and applications of any of following equipment; a. Spray dryer b. Fluidized bed dryer c. Vacuum dryer (4 marks; 1+1.5+1.5)

Q7. Write a detailed role on any two of following; a. basic requirement of packing material b. Spiral separator c. pneumatic aspirator (3)

Q8. What do you understand by flexible packaging? Discuss various types of plastic films used in food packaging in details (5)