

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATIONS-2022

B.Tech-6th Semester (BT)

COURSE CODE(CREDITS): Food and Agricultural Biotechnology(3)

MAX. MARKS: 35

COURSE NAME: 18B11BT612

COURSE INSTRUCTOR: Dr Hemant Sood

MAX. TIME: 2Hrs

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

- Q1. Transgenic disease resistance Strawberry by using leaf disc transformation by the *Agrobacterium* method was developed having 2% transformation efficiency? How you would like to use the direct DNA delivery technique for improving its transformation efficiency? How you can carry out a biosafety assessment of these developed transgenic plants for their safe usage?(CO5&6) (3.5+1.5)
- Q2. How do functional foods and nutraceuticals contribute to nutrient enrichment and pharmacological significance as per the standard nutrient food intake? How would you like to extrapolate the contribution of terpenoids for taking care of any targeted ailment?(CO4 and CO5) (2.5+2.5)
- Q3. Explain the components and benefits of any one indigenous foods used in your local area or you have acquainted with anywhere else. How is bioprocess technology used in improvising its present status and contributing to its commercialization? (CO1 &2) (2.5+2.5)
- Q4. How you can distinguish the effect of biofertilizers from organic fertilizers in targeted crop improvement? How the quality specifications for biofertilizers are to be tested for their production and fertigation in field crops? (CO3&4)(2.5+2.5)
- Q5. Which different factors contribute to Single Cell Protein or Mushroom production at a commercial scale? How many different products will be generated by using agricultural and food technology as food and medicine for the same? (CO2)(2.5+2.5)
- Q6. Which regulatory bodies are actively involved in Food Safety and Standard Evaluation? What is their mechanism of working and how strict adherence to the implementation of laws are carried out? (CO1 &2) (2+2)
- Q7. How pharmacological important phytochemicals are produced by advanced biotechnological methods? How aspects of commercial production can be integrated with biosafety and ethics?(CO5 &CO6) (2.5+2.5)