JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
TEST -3 EXAMINATION- 2025
B.Tech-VI Semester (BT)

COURSE CODE (CREDITS): 20B1WBT631 (03) **MAX. MARKS:** 35
COURSE NAME: Manufacturing Process and Industrial Products
COURSE INSTRUCTOR: Dr. Garlapati Vijay Kumar **MAX. TIME:** 2 Hours

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	**Summarize** how endophytes contribute towards the progress of medicine? **Write** about the plant selection, isolation, preservation and storage of the endophyes by depicting its life cycle?	IV	5
Q2	With a neat flow chart **explain** the different steps involved in the beer making process by **quoting** the purpose and activities associated with the each step of the process?	V	5
Q3	**Discuss** in detail about the "cell-media components", "Elicitors & Jasmonates" and "Metabolic Engineering approach" towards the enhanced secondary metabolites in plant cell cultures with suitable examples?	IV	5
Q4	**Tabulate** the different "scaling-up measures" used in Industrial fermentation by quoting the "opportunities", "weakness" and "Impact on the fermentation" features of each measure? **Explain** the "cultivation of hairy-root cultures" approaches on Industrial Scale?	I&II	5
Q5	**Describe** how "white wine making" process different from "red wine making" process by explaining the different steps involved? Explain the role of "Hops"and "Cork" in the making of "Beer" and "Wine", respectively?	V	5
Q6	**Explain** the different Process Heuristics Types and guidelines which can aid in the development of a pilot- or large-scale separation and purification process of fermented bioproducts?	III	5
Q7	**Write** about the following one's (a) Endophytic Fungal Products as Anticancer Agents (2.5 M) (b) Top-fermenting yeasts *Vs* Bottom-fermented yeasts in Beer making (2.5 M)	IV&V	5