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JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATION- Dec 2018

B.Tech (Biotech), VII Semester

COURSE CODE: 15M11BT431

MAX. MARKS:35

COURSE NAME: Traditional Bioprocesses & their upscaling

COURSE CREDITS: 03

MAX. TIME: 2 h

*Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.*

1. Mention the different product purity attributes in case of Mab's DSP? With a neat sketch depict the Mab recovery process along with the objectives? (CO I) (5 M)
2. Classify the principle types of flavour compounds used in foods? Write a note on the role of flavorist in food, pharmaceutical and cosmetic industries (CO II) (5 M)
3. Discuss in detail about the flavour production in the fermented products of Beer and Chocolate? (CO III) (5 M)
4. What are the main mechanisms exerted by phytochemicals towards health benefits? Give any two examples of phytochemicals along with their sources and roles? (CO III) (5 M)
5. What are the desirable properties, benefits and side effects of probiotics? Mention the different characteristics of prebiotics? (CO IV) (5 M)
6. Mention the advantages of using inorganic carriers in sol-gel based enzyme immobilization and discuss the process of sol-gel synthesis? (COIV)(5 M)
7. Discuss the role of surface instrumental techniques of SEM. TEM. XPS, CD and Microcalorimetry in immobilization technology (CO IV) (5 M)

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