

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

T-3 EXAMINATION- MAY 2019

B. Tech 8th Semester

COURSE CODE: 14B1WBT741

MAX. MARKS: 35

COURSE NAME: Bio-resources and Industrial Products

COURSE CREDITS: 3

MAX. TIME: 2.0 Hr

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

Q1 Write a short note on following with appropriate examples (2×3= 6 marks) CO IV, V

- (a) Bacteriocins as food preservatives
- (b) Beverages in food industry
- (c) Biosweeteners

Q 2 Write a short note on lignosulfonates and its uses (3 marks) CO III

Q 3 Write a short note on the role of biocosmetics and biofabrics as industrial products. Explain with examples (3 marks) CO V

Q 4 What are the various types of bioadhesives? Discuss the theory of bioadhesion. (4 marks) CO IV

Q 5 Discuss the major advantages of timber wood a plant bioresources. What are the factors which affects the physical properties of wood? (4 marks) CO II

Q 6 What are the various types of biopolymers? Discuss the methods of degradation of biopolymers (4 marks) CO II

Q7 Discuss the process of wood liquifaction and its types. What are the various commercial products obtained by liquefaction of wood? (5 marks) CO IV

Q 8 Write a note on following. (6 marks) CO IV

- (a) Clinical applications of probiotics
- (b) Protease in detergent industry
- (c) Mechanism of bioplastic synthesis