

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

Test 2 EXAMINATION- Apr 2018
B.Tech. Dual Degree/ M.Tech/Ph.D.

COURSE CODE: 10B1WBT737
COURSE NAME: ENVIRONMENTAL BIOTECHNOLOGY
COURSE CREDITS: 3

MAX MARKS: 25
MAX. TIME: 1.5 Hrs.

Note: All questions are compulsory. Attempt all questions of a particular section at one place.
Answer each question to the point.

Q1. Answer the following questions

- (a) Write the source organisms of Actinovate and Serenade and their uses? (2 marks)
- (b) Give two examples of plant pathogens which cause structural tissue injury? (2 marks)
- (c) What are the criteria I and criteria II for storage site of hazardous waste? (2 marks)
- (d) What are the different kinds of multifarious activities shown by *Bacillus subtilis*? (2 marks)

Q2. What are Plant Incorporated Protectants (PIPs)? Give two examples (3 marks)

Q3. Write a short note on arylsulphatase, chitinase and amidase and their roles in soil health. (3 marks)

Q4. What are the different types of N₂ fixing biofertilizers? Give three examples. (3 marks)

Q5. What do you understand by hazardous waste compatibility? Explain the conditions for compatibility. (4 marks)

Q6. Explain the mechanism of action of genetically modified BT (*Bacillus thuringiensis*) in BT cotton. Show diagrammatically. (4 marks)