

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT  
Test 3 EXAMINATION- May 2019  
B.Tech/ M.Tech BTDD

COURSE CODE: 10B1WBT737

COURSE NAME: ENVIRONMENTAL BIOTECHNOLOGY

COURSE CREDITS: 3

MAX MARKS: 35

TIME: 2.0 Hrs.

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

**Q No. 1** Explain the following terms. (1+1+1+1=4 marks) (CO IV)

- (a) Bioadhesives
- (b) Biofibers
- (c) Biochar
- (d) Syngas

**Q No. 2** Write short notes on the problems of fertilizers and pesticides on modern agriculture in India. (3 marks) (CO III)

**Q No. 3** Write a short note of gum Arabic and gelatin as biopolymeric compounds (2+2=4 marks) (CO IV)

**Q No. 4** What are the various sources of lipid waste in the environment? Explain the biocatalytic conversion of lipid waste. (2+2=4 marks) (CO VI)

**Q No. 5** What are biosensors? Explain the different types of biosensors for detection of pollutants in the environment. (2+3=5 marks) (CO VI)

**Q No. 6** Discuss the sources and biolubricants its types? What are the various advantages of biolubricants over chemical lubricants? (2.5+2.5=5 marks) (CO V)

**Q No. 7** Answer the followings. (4+4+2=10 marks) (CO IV, V, VI)

- (a) Write a brief note on Vermicomposting and landfill cycling.
- (b) Explain the process of Thermal liquefaction and Non condensable pyrolysis
- (c) Write a short note on bioluminescence