R09

Code No: D0304

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.TECH II - SEMESTER EXAMINATIONS, APRIL/MAY 2012
ENVIRONMENTAL BIOTECHNOLOGY
(BIOTECHNOLOGY)

Time: 3hours **Max. Marks: 60**

Answer any five questions
All questions carry equal marks
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1. Discuss the biotechnological applications for hazardous waste management.

2. What is sewage? Explain in detail the various processes that are employed in the treatment of municipal sewage.

3.a) Define recalcitrant compounds. Explain how these are formed.
b) Write notes on Detoxification of toxic organics.

4.a) Differentiate between FBR and IFBR.
b) Discuss various effects of Ozone depletion on earth.

5. Explain the following
   a) Sludge drying and sludge conditioning.
   b) Sludge lagooning.
   c) Land farming.

6. What is bioremediation? Differentiate between intrinsic and extrinsic bioremediation.

7.a) Explain how phytoremediation is helpful in waste water treatment.
b) What are the elements in EIA and briefly describe them?

8.a) What is the role played by biotechnologist towards environment protection?
b) Elucidate Microbial methods of soil improvement.

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