Roll No.
Total No. of Pages : 02
Total No. of Questions : 09
M.Sc.(BT) (2011 \& Onwards) (Sem.-2)

ENVIRONMENTAL BIOTECHNOLOGY
Subject Code : MSBT-106
Paper ID : [F0258]
Time : 3 Hrs.
Max. Marks : 60

## INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

## SECTION-A

1. Describe briefly :
a) Air pollution.
b) Noise pollution.
c) Rotating drums.
d) Upflow anaerobic sludge blanket reactors.
e) Oxidation ditches.
f) Xenobiotics.
g) Oil pollution.
h) Solid waste management.
i) Acid rain.
j) Ozone depletion.

## SECTION-B

2. What is environmental pollution? Describe the methodologies for environment management.
3. What is aerobic process? Describe the microbiology of activated sludge process and oxidation ponds.
4. Describe microbiological degradation of hydrocarbons and pesticides.
5. Discuss the bioremediation of contaminated soil and waste land.
6. Describe the treatment schemes of waste water from dairy industry.

## SECTION-C

7. What is water pollution? Describe its sources giving suitable examples. Enlist the physical, chemical and biological treatment processes for water pollution.
8. Write an essay on the microbiological degradation of xenobiotics in environment giving examples.
9. Describe various global environment problems. Also highlight their impact and biotechnological approaches for their management.
