



SB-3585

M. Sc. (Part - II) Examination

March / April - 2011

Environmental Chemistry : Paper - III

(Waste, Waste Management, Environmental Biology)

Time : 3 Hours]

[Total Marks : 70

Instructions :

(1)

नीचे दशांशविक \leftarrow निशान्तीवाणी विगतो उत्तरवली पर अवश्य लक्ष्मी. Fillup strictly the details of \leftarrow signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
\leftarrow M. Sc. (Part-2)	<input type="text"/>
Name of the Subject :	<input type="text"/>
\leftarrow Environmental Chemistry : Paper - 3	<input type="text"/>
\leftarrow Subject Code No. : <input type="text"/> 3 <input type="text"/> 5 <input type="text"/> 8 <input type="text"/> 5 \leftarrow Section No. (1, 2,.....) : <input type="text"/> 1&2	<input type="text"/>
	Student's Signature

(2) Attempt all the six questions.

(3) Figure to the right indicate full marks.

SECTION - I

- 1 (a) What is solid waste ? Give the classification of solid waste. Explain industrial wastes. 7
- (b) Give informative note on - Domestic and Hospital wastes. 5

OR

- 1 (a) Give detail account on - Management of Hazardous wastes. 7
- (b) Define Hazardous wastes. Describe "Love Canal Episode". 5

- 2 (a) Write detail notes on - Methods of solid waste treatment and disposal. 6
- (b) Describe biomedica wastes and sanitary land filling. 6

OR

- 2 (a) Explain - Involvement of microbiology in solid waste treatment. 6
 (b) Describe thermal process used in solid wastes treatment. 6
- 3 (a) Write a note on - metabolism of xenobiotic compounds. 6
 (b) Explain different forms of saccharides in Carbohydrates. 5
- OR**
- 3 (a) Explain metabolic processes in detail. 6
 (b) Explain the functions of carbohydrates. 5
 Describe the structure of DNA.

SECTION - II

- 1 (a) Describe the principles of radioactivity. Explain types, sources and consequences of nuclear radiations. 7
 (b) Explain the characteristics of nuclear wastes in detail. 5
- OR**
- 1 (a) Give detail account on - Storage and Disposal of radioactive wastes. 7
 (b) Explain the single channel energy flow model in detail. 5
- 2 Give informative note on following : (any three) 12
 (a) Micronutrient analysis in soil.
 (b) Chemical nature of soil contaminants.
 (c) Biochemical effects of arsenic and lead
 (d) Ecosystem
- 3 (a) What is Food chain ? Explain it according to grazing food chain and detritus food chain. 6
 (b) Explain - Cultivation and growth of microorganisms. 5
- OR**
- 3 (a) What is chemical toxicology ? Give the impact of toxic chemicals and enzymes. 6
 (b) Give the application of microbes in the environmental science. 5