

Reg. No. : .....

**D 706**

**Q.P. Code : [D 07 PES 01]**

(For the candidates admitted during 2007 onwards)

**M.Sc. DEGREE EXAMINATION, DECEMBER 2009.**

First Year

Environmental Science

**WATER POLLUTION AND MANAGEMENT**

Time : Three hours

Maximum : 100 marks

Answer any FIVE questions.

All questions carry equal marks.

1. Define the terms point source and non-point source of pollution. Explain with examples.
2. List the major types of water pollution in developing and developed countries.
3. Why chlorine is used in treatment of sewage and drinking water? What dangers does its use pose?
4. What are the major sources of ground water pollution? How it can be eliminated?

5. Describe primary and secondary wastewater treatment.

6. Pollution control devices are often viewed as stopgap measures. Why such measures essential for long-term sustainability?

7. Discuss the sources of oil in the ocean and ways to reduce oil concentrations.

8. Describe the water pollution Act 1974.

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**D 707**

**Q.P. Code : ID 07 PES 021**

(For the candidates admitted from 2007 onwards)

**M.Sc. DEGREE EXAMINATION, DECEMBER 2009.**

First Year

Environmental Science

**AIR POLLUTION AND MANAGEMENT**

Time : Three hours

Maximum : 100 marks

Answer any FIVE questions.

All questions carry equal marks.

(5 × 20 = 100)

1. Describe the history of Air pollution in Europe.
2. What is photochemical smog? and how does it form and what is industrial smog and how does it form?
3. What is the role of stratosphere in maintaining life on earth?
4. Distinguish the stationary and mobile sources of outdoor pollution?

5. List the major prevention and clean up methods of dealing with Air Pollution.
6. Write in detail on Motor Vehicle Act 1988.
7. List six ways of prevent Air Pollution with examples.
8. Summarize the problems of indoor pollution from formaldehyde, radio active radon gas and asbestos fibres.

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**D 708**

**Q.P. Code : [D 07 PES 031]**

(For the candidates admitted from 2007 onwards)

**M.Sc. DEGREE EXAMINATION, DECEMBER 2009.**

First Year

Environmental Science

**SOIL POLLUTION AND SOLID WASTE  
MANAGEMENT**

Time : Three hours

Maximum : 100 marks

Answer any FIVE questions. (5 × 20 =100)

All questions carry equal marks.

1. Explain the importance of macro and micronutrients in the soil.
2. Explain with examples how fertilizers and pesticides cause soil pollution.
3. Classify chemically hazardous wastes. Add a note on treatment for unsegregated wastes.
4. Give an account of vermicomposting and land fills.
5. How are industrial and hospital hazardous wastes are managed, segregated and recovered?

6. Explain the roles of incineration, pyrolysis and composting in municipal solid waste management.

7. Highlight the salient aspects of Hazardous waste (Management and Handling) Rules 1989.

8. State the Manufacture storage and Import of Hazardous chemicals rules 1989.

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**D 709**

**Q.P. Code : [D 07 PES 04]**

(For the candidates admitted from 2007 onwards)

**M.Sc. DEGREE EXAMINATION, DECEMBER 2009.**

First Year

Part III — Environmental Science

**INSTRUMENTAL METHODS OF ANALYSIS**

Time : Three hours

Maximum : 100 marks

Answer any FIVE questions.

(5 × 20 = 100)

All questions carry equal marks.

1. Discuss the principle of paper chromatography and explain the dimensional paper chromatography.
2. What is thin layer chromatography? Why is thin layer chromatography superior to other types of chromatographic methods?
3. Write a note on principle, procedure and applications of IR.

4. Write a note on principle, instrumentation and environmental applications of flame photometer.

5. What are potentiometric titration and how they are performed? Discuss briefly the methods of end point location.

6. Write a note on AAS.

7. Explain the role of ANOVA in environmental data analysis.

8. Write a note on Turbidometry.

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