

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 2687

Roll No.

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B.Tech.

(SEM. VII) ODD SEMESTER THEORY
EXAMINATION 2013-14

**INDUSTRIAL POLLUTION CONTROL AND
ENVIRONMENTAL AUDIT**

Time : 3 Hours

Total Marks : 100

Note :- Attempt all questions.

1. Attempt any **four** parts of the following : **(5×4=20)**
 - (a) Discuss the effects of noise pollution and radiation emission.
 - (b) Explain recovery and recycling of various chemical wastes in detail.
 - (c) Briefly explain the waste-water treatment methods.
 - (d) What do you understand by e-waste ? Discuss.
 - (e) Write notes on classification and sources of pollution.
 - (f) What are the various industrial processes requiring water and how does it affect the water quality ?
2. Attempt any **four** parts of the following : **(5×4=20)**
 - (a) How is the control and removal of chemicals such as cyanide, fluoride, toxic organics performed ?
 - (b) Explain dewatering of sludge in detail.
 - (c) What are the methods to control the ill-effects of radioactivity ?

- (d) Explain du-ponts powdered activated carbon process in detail.
- (e) Write a story on greenbelt development and rain water harvesting.
- (f) What is the method to determine the quantity of oil and grease in a waste-water sample ? Give detail.
3. Attempt any **two** parts of the following : **(10×2=20)**
- (a) What are hazardous wastes ? Discuss the concept and its management aspect.
- (b) What are the standards for noise control ? What are the various air pollution control technologies ?
- (c) List the various liquid and gas emissions from various industries in India. How the organic vapour is treated by absorption process ? Explain.
4. Attempt any **two** parts of the following : **(10×2=20)**
- (a) Discuss about the treatment of liquid effluent from a peterochemical industry.
- (b) What are the recent trends in industrial waste management ? Explain.
- (c) Write down characteristics of liquid effluent from a sugar mill. Draw a flow diagram for the treatment of the same. Also give some detail of each unit shown in the flow diagram.

5. Attempt any **two** parts of the following : (10×2=20)

(a) Write short notes on :

(i) Environment Protection Act

(ii) Forest Conservation Act.

(b) Define EIA and explain EIA types. List the tools of preventive environmental management.

(c) Write the three important sections of National Environment Policy Act (NEPA) of USA and explain. What are the internal and external objectives of an Environmental Management System based on ISO-14001-2004.