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B. TECH.
(SEM. VII) THEORY EXAMINATION 2020-21
INDUSTRIAL POLLUTION CONTROL AND ENVIRONMENTAL AUDIT

Time: 3 Hours

Max Marks: 100

Note : Attempt all the questions.

SECTION-A

1. Attempt all parts.**(2x10=20)**

- (a) Write down the sources and effects of CFCs .
- (b) What are the methods to remove cyanide from waste water?
- (c) What do you mean by "Zero Discharge effluent"?
- (d) What is the difference between Nano-filtration and Reverse Osmosis?
- (e) What are the causes of radiation pollution?
- (f) How do industrial processes affect the water quality? Explain.
- (g) What do you mean by EMS?
- (h) What are the benefits of ISO 14000?
- (i) What is the difference between Compliance auditing and system auditing?
- (j) What are the wastes generated from distillery industry?

SECTION-B

2. Attempt any five parts.**(10x5=50)**

- a) Discuss about anaerobic treatment processes of organic wastes in water. Also explain volatile organic compounds.
- b) What are the sources of air pollution? Discuss about oxides of sulphur and oxides of nitrogen.
- c) Discuss about following contaminants present in industrial wastewater?
 - i) Biodegradable organics matter,
 - ii) Fluoride,
 - iii) Cyanide.
- d) Write the name of various gaseous particulate control devices. Explain Gravitational settling chamber and Wet scrubbers with neat sketch.
- e) Discuss hierarchy of various treatment option of industrial waste. Which type of waste should be disposed off into a landfill as per solid waste management rule (2000)? What are main pathways involved for environmental contamination?
- f) Discuss about the treatment of effluent generated from metal plating industry.
- g) What do you understand by an Environmental Management System? Explain its features also.
- h) Explain all the key features of Environmental Protection Act (1986) of India.

SECTION-C

Note: Attempt any two parts:**(15x2=30)**

3. Discuss in details the different pollutants causing air pollution.
4. Discuss about the effluent generated in steel industries and impact of effluents on water bodies. Explain the waste water treatments required for steel industry.
5. What do you understand by Environmental Auditing? Briefly discuss scope and different steps involved in audit process.