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H83

B. Tech. EXAMINATION, 2020

(Eighth Semester)

(B. Scheme) (Main & Re-appear)

ENVIRONMENTAL POLLUTION CONTROL

CHE451B

(CHE)

Time: 3 Hours [Maximum Marks: 75]

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note: Attempt Five questions in all, selecting at least one question from each Unit.

Unit I

- 1. Give your views on How Industrial activities affect environment or contributing towards environment pollution. Discuss by giving a suitable example.
- **2.** Write short notes on the following :
 - (a) Role of Regulatory requirement in controlling pollution
 - (b) Global warming and its control measures.

 $2 \times 7\frac{1}{2} = 15$

Unit II

With the help of brief description of each, write down different categories of air pollutants, their origin, sources and effects on living organisms as well as on vegetation. Define photochemical smog and its reactions.
12+3=15

- 4. (a) Differentiate between indoor and outdoor air pollutants highlighting their effects with example.
 - (b) With the help of neat sketch, explain working of :
 - (i) Bag Filters
 - (ii) Tape Sampler.

 $2 \times 4 = 8$

Unit III

5. What is the major difference between Primary and secondary waste water treatment processes. Explain Trickling filters with the help of a neat sketch, also its applications.

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Define BOD, COD, BOD curve. Derive an expression to calculate BOD. Explain any two methods used for removal of dissolved impurities in waste water with sketches.

Unit IV

- 7. (a) Highlight the key points of Solid waste management SWM Act, 2016.
 - (b) Discuss different methods used for decomposing solid waste and their ill effects on environment.
- 8. Discuss various pollution monitoring methods and control methods being used in paper and pulp industries with the help of a block diagram.15