

Paper Id: 269207

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M. TECH.
(SEM-II) THEORY EXAMINATION 2017-18
ENVIRONMENTAL POLLUTION & ITS CONTROL

*Time: 3 Hours**Total Marks: 70***Note:** Attempt all Sections. If you require any missing data; then choose suitably.**SECTION A****1. Attempt all questions in brief. 2 x 7 = 14**

- a. Define different types of air pollutants.
- b. Write short note on impact of air quality on human health.
- c. What are various sources of air pollution?
- d. Describe green house effect.
- e. Enlist the various devices used in air quality monitoring.
- f. What do mean by thermal pollution?
- g. Write short note on environmental pollution.

SECTION B**2. Attempt any three of the following: 7 x 3 = 21**

- a. What is screening process? Write down the importance of consideration of alternative path in EIA process.
- b. Briefly explain the effects of varying concentrations of CO, SO₂, H₂S, NO and NO₂ in air.
- c. Describe wet scrubber along with diagram.
- d. What are the various legal aspects for control of industrial air pollution?
- e. Discuss the effects of urbanization and industrialization on human health.

SECTION C**3. Attempt any one part of the following: 7 x 1=7**

- (a) What is global warming? Enlist various causes and effects of global warming on environment.
- (b) Explain the working principle of ESP with neat diagram

4. Attempt any one part of the following: 7 x 1= 7

- (a) Write short note on-
 - a) ESP
 - b) Cyclone separator
- (b) Define Air (Prevention and Control of Pollution) Act. Discuss its Salient features.

5. Attempt any one part of the following: 7 x 1= 7

- (a) Explain Gaussian plume in detail. What are the parameters relevant to thermal plume and also give their limitations?
- (b) Name various devices used for air pollution control in industry. Also explain the working of any one of them with neat diagram.

6. Attempt any *one* part of the following:

7 x 1= 7

- (a) Give the classification of atmosphere according to temperature variation.
- (b) Discuss various mathematical models related to dispersion and transport of air pollutants.

7. Attempt any *one* part of the following:

7 x 1= 7

- (a) Explain various plume behavior with neat diagram.
- (b) Explain in detail the importance of OZONE present on earths' atmosphere.