

Code:19CE4602E

III B.Tech - II Semester – Regular Examinations – JUNE 2022

AIR POLLUTION & ITS CONTROL
(CIVIL ENGINEERING)

Duration: 3 hours

Max. Marks: 70

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- Note: 1. This question paper contains two Parts A and B.
2. Part-A contains 5 short answer questions. Each Question carries 2 Marks.
3. Part-B contains 5 essay questions with an internal choice from each unit. Each question carries 12 marks.
4. All parts of Question paper must be answered in one place.
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PART – A

1. a) Define Primary Pollutants.
- b) Define Plume Rise.
- c) What are the methods used for control of gaseous pollutants?
- d) What is process change?
- e) Discuss “Air Act”.

PART – B

UNIT – I

2. a) Define Air Pollution and classify about natural and artificial sources. 6 M
- b) With examples, explain about point and non-point sources of air pollutants. 6 M

OR

3. a) Write about the effects of air pollutants on materials. 6 M
- b) Write about causes, effects and control measures of Greenhouse effect. 6 M

UNIT – II

4. Explain about various meteorological parameters which influences air pollution. 12 M

OR

5. a) Explain the steps for preparing of Wind Rose Diagram with neat sketch. 6 M

b) Explain in detail about plume rise models. 6 M

UNIT-III

6. Explain the principle and working of Electrostatic Precipitators with diagram. 12 M

OR

7. Explain about NO_x control techniques. 12 M

UNIT – IV

8. Explain wet and dry methods used in In-Plant control measures. 12 M

OR

9. Explain the principle and working of Internal Separators with neat sketch. 12 M

UNIT – V

10. Discuss about the Emission Standards. 12 M

OR

11. Explain about SPM collection procedure and emission standards of SPM. 12 M