

**B.Tech Sem – VIII (2007 Course) (Chemical Engg.) : WINTER  
- 2017  
SUBJECT : ELECTIVE – II : AIR POLLUTION CONTROL ENGINEERING**

Day : **Wednesday**  
Date : **22/11/2017**

**W-2017-2644**

Time : **02.30 PM TO 05.30 PM**  
Max. Marks : **80**

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**N. B. :**

- 1) **Q. No. 1 and Q. No. 5 are COMPULSORY.** Out of remaining attempt **ANY TWO** questions from each section.
  - 2) Figures to the right indicate **FULL** marks.
  - 3) Answers to both the sections should be written in **SEPARATE** answer books.
  - 4) Draw neat and labelled diagram **WHEREVER** necessary.
  - 5) Use of non-programmable calculator is **ALLOWED**.
  - 6) Assume suitable data, if necessary.
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**SECTION - I**

- Q. 1** a) State the legislation governing air pollution prevention and control. **(05)**  
b) Discuss briefly on natural and manmade pollution of air and its effects on vegetation. **(05)**  
c) Explain the working of F. I. D. for hydrocarbon analysis. **(04)**
- Q. 2** Explain the types of air pollution and air pollution aspects. **(13)**
- Q. 3** Classify the air pollutants, state their properties and effect of gaseous pollutants on man and vegetation. **(13)**
- Q. 4** Discuss the method and procedure for the sampling and analysis of nitrogen oxide. **(13)**

**SECTION – II**

- Q. 5** a) Write note on gravity settling chamber. **(05)**  
b) Discuss adsorption technique for the removal of gaseous pollutants. **(05)**  
c) Write a note on air pollution control in a fertilizer industry. **(04)**
- Q. 6** a) Explain in detail E. S. P. with neat sketch. **(08)**  
b) What is cyclone separator? Explain its working. **(05)**
- Q. 7** Explain in detail absorption by liquid with neat sketch. **(13)**
- Q. 8** a) Explain in detail pollution control aspect of sugar industry. **(06)**  
b) Name various air pollutants emitted from distillery. **(07)**

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