

Total No. of Questions : 10]

SEAT No. :

P6084

[Total No. of Pages : 2

[5561]-119

B.E. (Civil)

**AIR POLLUTION AND CONTROL (Elective - III)
(2012 Pattern) (End Semester)**

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Attempt Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8 and Q.9 or Q.10.*
- 2) *Figures to the right indicate full marks.*
- 3) *Draw neat figures wherever necessary.*
- 4) *Assume suitable data, if necessary.*
- 5) *Use of scientific calculator is allowed.*

Q1) a) What are the zones of atmosphere? Explain. **[5]**

b) Write short note on: Wind rose diagram & its use in air pollution studies. **[5]**

OR

Q2) a) Explain the purpose of ambient air sampling and stack gas sampling. **[5]**

b) What is iso kinetic sampling? Explain with a neat sketch. Why it is required? **[5]**

Q3) a) Explain sources and measurement of odour. **[5]**

b) Explain effects of indoor air pollution with respect to gases and their concentration. **[5]**

OR

Q4) a) Explain the analysis of air samples for SO₂ and NO₂ by using chemical method. **[5]**

b) What are the factors considered in calculating plume rise? Write formulae for calculating plume rise? **[5]**

P.T.O.

Q5) a) Write short note on Control of air pollution from automobiles. **[8]**

b) Explain any gases control equipment working on principle of adsorption and absorption. **[8]**

OR

Q6) a) Explain in brief about: Control of air pollution by process modification. **[8]**

b) Explain following control equipment for particulate matter collection with parameters (working principle, schematic sketch, design parameters, types, advantages, disadvantages and application) **[8]**

i) Cyclone

Q7) a) Write note on air pollution control by land use planning. **[8]**

b) Explain powers, functions and penalties under Air Act 1981. **[8]**

OR

Q8) a) Write note on economics of air pollution control. **[8]**

b) Explain the important provisions made in Environment (Protection) Act 1986. **[8]**

Q9) a) What is a need of Environmental Impact Assessment (EIA)? Also write about Indian Policies Requiring EIA. **[9]**

b) Explain the EIA Cycle and Procedures. **[9]**

OR

Q10) a) Explain methodology for preparing environmental impact assessment report. **[9]**

b) Write the environmental rules 1999 (siting of industries) as per the notification of Ministry of Environment and Forests. **[9]**

