Total No. of Questions: 10]

SEAT No. :

[Total No. of Pages: 2

### P3772

### [4760]-79 M.E. (Civil-WREE)

# AIR POLLUTION ENGINEERING

(2012 Course) (Elective-I) (Semester-I)

Time: 3 Hours [Max. Marks: 100

Instructions to the candidates:

- 1) Answer any three questions from section-I and section-II.
- 2) Each question carries equal marks.
- 3) Figures to the right indicate full marks.
- 4) Your answers will be valued as a whole.
- 5) Assume suitable data, if necessary.

#### **SECTION-I**

- **Q1)** a) Discuss physics of atmosphere.
  - b) Discuss about Pasquil stability model.
- **Q2)** a) Explain how eddy diffusion model is useful.
  - b) Discuss sampling time correction.
- **Q3)** Give note on following:
  - a) Maximum Ground level concentration.
  - b) Line source and point source.
- **Q4)** Explain how stack height determined? Assume suitable data for explanation.
- **Q5)** Discuss the following:
  - a) Control of odour pollution.
  - b) Air pollution Survey.
  - c) Stack emission monitoring.

## **SECTION-II**

Q6)	Explain in details about:		
	a)	Terminal Settling Velocity.	
	b)	Sources of SPM.	
	c)	Iso-kinetic sampling.	
Q7)	Exp	lain the working of following with suitable sketches (Any Two):	
	a)	Electrostatic Precipitators.	
	b)	Settling Chambers.	
	c)	Wet collector.	
Q8)	Give note on the following and explain (Any Two):		
	a)	Principle of absorption.	
	b)	Control of Nox.	
	c)	Incineration.	
Q9)	Disc	cuss any one method in detail to reduce emissions from automobile sources	
Q10)Discuss the strategy for effective control of air pollution in India.			