

Total No. of Questions : 10]

P3748

SEAT No. :

[Total No. of Pages : 2

[5059]-519

B.E. (Civil)

Air Pollution and Control (Elective - III)

(2012 Pattern) (End Sem.)

Time : 2.5 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Solve Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8, Q.9 or Q.10.*
- 2) Neat diagrams must be drawn wherever necessary.*
- 3) Figures to the right indicate full marks.*
- 4) Use of logarithmic tables, slide rule, Mollier charts, electronic pocket calculator and steam tables are allowed.*
- 5) Assume suitable data, if necessary.*

- Q1)** a) Explain Stratosphere and Chemosphere. [6]
b) What are the limitations of Gaussian model? [4]

OR

- Q2)** a) Explain the following secondary meteorological factors influencing air pollution: [6]
i) Precipitation
ii) Humidity and
iii) Visibility
b) What is air cleaning system for control of indoor air pollution? [4]

- Q3)** a) Write a short note on high volume sampler with sketch. [6]
b) What are the causes of indoor air pollution? [4]

OR

- Q4)** a) Explain stable and unstable atmosphere. [6]
b) Explain any one method to control odour pollution. [4]

- Q5)** a) What are the advantages and disadvantages of fabric filter? [8]
b) Draw a neat sketch of the standard cyclone proportions in terms of diameter D. State expression for (dpc) cut size of particle and separation factor (Fc). [8]

P.T.O.

OR

- Q6)** a) Explain working principle of Electrostatic Precipitator with a neat sketch. [8]
b) What are the objectives of air pollution control equipment? Explain with example control of air pollution at source. [8]
- Q7)** a) Explain an important provision made in “The AIR (Prevention and Control of Pollution) ACT 1981”. [8]
b) What are the advantages and disadvantages of a gravity settling chamber. [8]

OR

- Q8)** a) What is the purpose of environmental (protection) ACT 1986? Explain the powers and duties of central and state pollution control boards. [8]
b) Explain procedure of EIA. [8]
- Q9)** a) Write the environmental rules 1999 (siting of industries) as per the notification of Ministry of Environment and forests. [9]
b) What is land use planning? Explain its importance in controlling air pollution. [9]

OR

- Q10)** a) Explain roles of different authorities in the EIA Process. [9]
b) What is a need of Environmental Impact Assessment (EIA)? Also write about Indian Policies requiring EIA. [9]

