

**M. Sc. (Environment Science and Technology) Sem - II (CBCS) (2013  
Course) : WINTER - 2018**

**SUBJECT :AIR AND NOISE POLLUTION MANAGEMENT**

Day : Friday

**W-2018-1233**

Time : 10.00 AM TO 01.00 PM

Date : 16/11/2018

Max. Marks : 60

---

**N.B.**

- 1) Answer any **FIVE** questions.
  - 2) Figures to the right indicate **FULL** marks.
  - 3) Draw diagrams wherever necessary.
- 

- Q.1** a) Describe the structure of the atmosphere and add a note on the significance of the troposphere and stratosphere in air pollution studies. **(06)**
- b) Why are valleys more susceptible to air pollution as compared to flat terrain? **(06)**
- Q.2** a) Describe in detail the mechanism for control of air pollution in a cement industry. **(06)**
- b) Describe the various environmental criteria for siting of industries. **(06)**
- Q.3** a) Describe the principle, working and function of gravity settlers and fabric filters in air pollution control. **(06)**
- b) Write a note on smoke monitoring. **(06)**
- Q.4** a) Solve the following: **(06)**  
i) Convert CO of  $30 \mu\text{g}/\text{m}^3$  at  $30^\circ\text{C}$  to ppm at normal temperature condition.  
ii) Convert  $\text{SO}_2$  of 30 ppm at  $25^\circ\text{C}$  to  $\mu\text{g}/\text{m}^3$  at  $30^\circ\text{C}$ .
- b) Write a note on atleast three preventive techniques of air pollution. **(06)**
- Q.5** a) Write a note on the role of scrubbers in gaseous air pollution control. Explain the venturi scrubber with a diagram. **(06)**
- b) Write a note on noise control measures with emphasis on control at source, transmission and recipient. **(06)**
- Q.6** Write short notes on any **THREE** of the following: **(12)**  
a) Effect of air pollution on human health  
b) Air quality indices  
c) ESP  
d) Green belt

\* \* \*