

**M. SC. (ENVIRONMENT SCIENCE AND TECHNOLOGY) SEM -  
II (CBCS) (2013 COURSE) : SUMMER - 2018  
SUBJECT : AIR AND NOISE POLLUTION MANAGEMENT**

Day : **Wednesday**  
Date : **25/04/2018**

**S-2018-1104**

Time : **10.00 AM TO 01.00 PM**  
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) Explain the Gaussian dispersion model for determining ground level concentration of pollutants. (06)
- b) Describe the various types of plumes formed in relation to different weather and temperature conditions. (06)
- Q.2** a) In recent years the Supreme Court has played an active role in combating air pollution. Discuss. (06)
- b) Write a note on proper disposal of air effluents. (06)
- Q.3** a) Write a note on the role of green belts. What is the ideal design for a green belt? (06)
- b) Write a note on sampling principle and method for sampling of dust. (06)
- Q.4** a) Write a note on engine exhaust emission with a diagram. (06)
- b) A high volume sampler is being operated at 3 lit/min for 4 hours. The filter paper weight is 5 gm at commencement and 5.8 gm at the end of the observation period. Find the SPM concentration in  $\mu\text{g}/\text{m}^3$ . (06)
- Q.5** a) Discuss bioremediation for air pollution control. (06)
- b) Discuss the role of wet scrubbers and cyclones in air pollution control. (06)
- Q.6** Write short notes on any **THREE** of the following: (12)
- a) Effects of noise pollution on human health
  - b) Mixing height
  - c) Settling chamber
  - d) International and national noise standards

\* \* \*