

M.Sc. (Part - II) (Environmental Science) (CBCS Pattern) Semester - III  
**PSCENVT11-1-A (Core Elective) Paper-XI : Air Pollution Control**

P. Pages : 1

Time : Three Hours



**GUG/S/23/11263**

Max. Marks : 80

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- Notes : 1. All questions are compulsory and carry equal marks.  
2. Illustrate the answers with suitable diagrams and examples.

**1.** Explain classification of air pollutants in detail. **16**

**OR**

a) How natural and manmade factors influence air quality? **8**

b) State techniques for reduction of volatile organic compounds. **8**

**2.** Discuss components of high volume air sampler used for air sampling. **16**

**OR**

a) Explain sulphation rate. **8**

b) Explain analytical method for determination of heavy metals in SPM. **8**

**3.** Discuss the methodology for measurement of SO<sub>2</sub> at the source. **16**

**OR**

a) What is sampling train? How isokinetic sampling is carried out? **8**

b) Discuss plume behaviour in different meteorological conditions. **8**

**4.** Discuss in brief devices used for particulate emission control. **16**

**OR**

a) Explain adsorption as one of the techniques for gaseous emission control. **8**

b) Discuss the cleaner technologies for particulate control. **8**

**5.** a) Explain urban heat island phenomenon. **4**

b) Write about electrostatic precipitation. **4**

c) what is cascade impactor. **4**

d) Write a note on carbon sequestration through forestry. **4**

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