

B.Tech. CIVIL ENGINEERING (BTCLEVI)**Term-End Examination****December, 2015****BICEE-012 : AIR QUALITY MONITORING AND CONTROL***Time : 3 hours**Maximum Marks : 70*

Note : Answer any five questions. All questions carry equal marks.

1. (a) What is air pollution ? What are its sources ? Also explain Primary and Secondary pollutants. 7
- (b) Explain the various effects of air pollution on plants. 7
2. (a) Write the effects of air pollutants on buildings and structures, giving suitable examples. 7
- (b) Explain in brief, the meteorological parameters that influence air pollution. 7
3. (a) Explain the economic and social aspects of air pollution. 7
- (b) What do you understand by sources and sinks of air pollution ? Explain with an example. 7

4. (a) Explain the various control techniques of air pollution at source. 7
- (b) List out the various control equipments used in control of air pollution. Explain about any one of them. 7
5. (a) Write short notes on the following : $2 \times 3 \frac{1}{2} = 7$
- (i) Urban Heat Island
- (ii) Acid Rain Formation
- (b) What is a Wind rose diagram ? How is it made ? What are its uses ? 7
6. (a) Write the main objectives of the sampling at source. How is the location decided for collection of samples of polluted air ? 7
- (b) Explain the procedure for particulate matter sampling. 7
7. Write short notes on any **four** of the following : $4 \times 3 \frac{1}{2} = 14$
- (a) Industrial Hygiene
- (b) Industrial Ventilation
- (c) Zoning Practices in India
- (d) Occupational Diseases
- (e) Industrial Lighting