

B.Tech. CIVIL ENGINEERING (BTCLEVI)

Term-End Examination

December, 2014

00985

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) Discuss the problems associated with air pollution, with an example of a historical air pollution episode. 7
- (b) What are the various effects of air pollution on animals and plants ? Discuss in detail. 7
2. (a) How do the meteorological conditions affect air pollution ? Discuss in detail. 7
- (b) Distinguish between primary and secondary air pollutants using examples. 7
3. (a) What are some of the commonly found air pollutants in Indian cities ? What are the toxicity issues related to these pollutants ? 7
- (b) Write short notes on the following : $2 \times 3 \frac{1}{2} = 7$
 - (i) Wind Rose
 - (ii) Acid Rain

4. (a) Discuss the properties of NO_x . Explain in detail the procedure for sampling and analyzing NO_x . 10
- (b) Distinguish between Smoke and Smog. 4
5. (a) What do you understand by sources and sinks of air pollution ? Explain with the help of an example. 7
- (b) What is the necessity of air pollution standards ? Write a detailed note on National Ambient Air Quality Standards. 7
6. (a) Write notes on the following : $2 \times 3 \frac{1}{2} = 7$
- (i) Site Selection
- (ii) Zoning
- (b) What are the various strategies for control of air pollution ? Explain with relevant examples. 7
7. (a) Write a detailed account of status of air pollution control in various countries. 7
- (b) What do you understand by "Industrial Hygiene" and why is it important ? 7
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