Reg. No. : | | | | | | | | | | |

Question Paper Code: 59111

B.E. / B.Tech. DEGREE EXAMINATION, SEP 2020

Elective

Civil Engineering

15UCE911- AIR POLLUTION MANAGEMENT

(Regulation 2015)

Duration: One hour Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

(Answer any Six of the following Questions)

1. Acid rain is caused by increase in the atmospheric concentration of___ CO1- R

   (a) Ozone and dust (b) SO_2 and NO_2 (c)SO_3 and CO (d)CO_2 and CO

2. Among the following, a secondary pollutant is_____ CO1- R

   (a) PAN (b)SO_2 (c) CO (d) Aerosol

3. Which of the following is a primary parameter which influences air pollution? CO2- R

   (a) Humidity (b) Solar Radiation (c) Temperature (d) Visibility

4. Most favorable plume with respect to minimizing air pollution is CO2- R

   (a) Fumigating (b)Trapping (c) Lofting (d) Looping

5. Particulate pollutant are_____ CO3- R

   (a) Small solid particles and liquid droplets (b) Liquid droplets in atmosphere

   (c) Small solid particles released into the atmosphere (d) All of the above

6. Spray tower is a type of CO3- R

   (a) Scrubbers (b) Wet precipitators (c) Fabric filter (d) Cyclone separators

7. Gravitational settling chamber for removal of particles exceeding size CO3- R

   (a) 50μ (b)30μ (c)20μ (d) 40μ

8. _____ is the mathematical simulation of how air pollutants disperse in the ambient atmosphere. CO4- R

   (a) Wind speed (b) Stack height

   (c) Dispersion models (d) Gaussian plume model

9. Which of the following is used in ceramic industries? CO4- R

(a) Electro static precipitator (b) Dynamic precipitator

(c) Spray tower (d) Cyclone scrubber

10. The Air (Prevention and Control of pollution) Act_____ was enacted by the central government CO4- R

(a) 1981 (b)1982 (c)1983 (d) 1984

PART – B (3 x 8 = 24 Marks)

(Answer any Three of the following Questions)

11.	Explain in detail about the effects air pollution on vegetation.	CO1-U	(8)
12.	Explain in detail about the classification of Air Pollutants.	CO1-U	(8)
13.	Explain in detail about the plume rise pattern with neat sketch.	CO2-U	(8)
14.	Explain the principle of operation and working of Scrubbers with neat sketch.	CO3-U	(8)
15.	Explain in detail about methods of zoning.	CO4-U	(8)