

SUBJECT CODE NO:- P-210
FACULTY OF ENGINEERING AND TECHNOLOGY
T.E. (CIVIL) Examination May/June 2017
Environmental Engineering - I
(Revised)

[Time:ThreeHours]

[Max.Marks:80]

Please check whether you have got the right question paper.

N.B

- i) Attempt any three questions from each section.
 Q.1 from section A and Q.6 from section B are compulsory.
 ii) Assume suitable data if necessary.
 iii) Draw neat and labelled diagram wherever necessary

Section A

- Q.1 Explain the source and classification of air pollutants. 10
- Q.2 a. Explain primary and secondary Air pollutants. 07
 b. Explain effect of air pollution on animals. 08
- Q.3 a. Describe the mechanism of ESP and its advantages and disadvantages. 07
 b. Write down air pollution law and ambient air quality std. 08
- Q.4 A) Determine stack height 08
 a. physical stack height =250mt tall with 1.2 mt inside dia.
 b. Wind velocity=3.0 mt/sec
 c. Air temp is 35^oc and Barometric pressure is1200 mili bars .
 d. Stack velocity =12m/s and stack gas temp. is 300^oc
 B) Describe the different methods of controlling air pollution. 07
- Q.5 Write short notes (any three) 15
 a. Acid Rain
 b. Photochemical air pollution
 c. Smog
 d. Green house Effect

Section B

- Q.6 a. what are the various type of water demand. Explain in detail 05
 b. State the factors that effects the rate of water demand 05
- Q.7 a. Explain Biological WQ parameter 07
 b. In continues flow setting tank 3.5m deep and 65m long, flow velocity of water is observed as 1.22 cm/sec. 08
 What size of particles of sp-gravity 2.65 may be effectively removed in the tank, if the kinematic viscosity of water is 0.01 cm²/sec.
- Q.8 a. Explain operating troubles in RSF 07
 b. Explain break point chlorination in detail 08
- Q.9 a. Define term 08
 1. Plain chlorination
 2. pre chlorination
 3. Post chlorination
 4. Super chlorination
 b. what are the different types of coagulants ?Explain any one. 07
- Q.10 Write short note (any three) 15
 1. Aeration
 2. Reservoir intake
 3. Fire demand
 4. pressure filter
 5. clarriflocculator