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

Question Paper Code: 58966

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2019

One credit Course

Chemical Engineering

15UCH866 - POLLUTION CONTROL ENGINEERING

(Regulation 2015)

Duration: 1.30 hours Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. What was the rank of India in Environment Performance Index amongst 178 countires participated during the year 2013 CO1-R

   (a) 95 (b) 135 (c) 155 (d) 115

2. Excess fluoride in water may cause CO1-R

   (a) straining of teeth excess (b) urine

   (c) diahhrea (d) inflammation of lever

3. According to EPA of USA, the following is not one of the six major pollutants? CO1-R

   (a) Ozone (b) Carbon monoxide (c) Nitrogen oxides (d) Carbon di-oxide

4. This is not a Green House gases CO1-R

   (a) CH_4 (b) N_2O (c) O_3 (d) N_2

5. Which pollutant gas dissolved with human blood faster than oxygen CO1-R

   (a) SO_2 (b) CO (c) O_3 (d) N_2O

6. The Pollution Standard Index (PSI) scale has span from CO2-R

   (a) 0-200 (b) 0-300 (c) 0-400 (d) 0-500

7. The boiler flue gas is source of CO2-R

   (a) HCl (b) NO (c) HF (d) Volatile organic compounds

8. The maximum permissible limit for suspended solids is CO2-R

(a) 10 mg/l (b) 20 mg/l (c) 30 mg/l (d) 40 mg/l

9. Suspended solids are measured by CO2-R

(a) Turbidity rod (b) Gravimetric test

(c) Chromatography (d) Jackson's turbidity meter

10. Identify the correct relation between the following? CO2-U

(a) Dissolved solid = Total solid + Suspended solid

(b) Dissolved solid = Total solid – Suspended solid

(c) Dissolved solid = Suspended solid – Total solid

(d) Total solid = Dissolved solid / Suspended solid

PART – B (5 x 2= 10Marks)

11. What are sources of air pollution? CO1-R

12. Explain the terms (i) Contaminants (ii) Disinfection CO1-R

13. List out some of the regulations on waste water Engineering. CO1-R

14. Write some important properties of tracers. CO2-R

15. Write the Mass balance principle CO2-R

PART – C (2x 15= 30 Marks)

16. (a) Explain in detail about the provisions for attainment and maintenance of national ambient air quality standards and provisions relating to mobile sources . CO1-U (15)

Or

(b) Explain in detail about the analysis of constituent mass loading data. CO1-U (15)

17. (a) Give the detail account of physical unit operation involved in waste water treatment. CO2-U (15)

Or

(b) Explain in detail about the policies and regulation of environmental impacts. . CO2-U (15)