

M.E DEGREE EXAMINATIONS: JUNE 2012

Second Semester

ENERGY ENGINEERING

EEG506: Environmental Engineering and Pollution Control

Time: Three Hours

Maximum Marks: 100

Answer ALL Questions:-

PART A (10 x 2 = 20 Marks)

1. Name the phenomenon which causes the change in the global atmosphere.
2. Explain the essential features of ISO 14001:2004 and ISO 14004: 2004 in the Environmental Management.
3. What are the primary methods for improving indoor air quality in most buildings?
4. Name the different control methods adopted to reduce the air pollution.
5. What is the water pollution?
6. How can quality of water be referred?
7. How wastes are classified?
8. What is waste minimization?
9. How noise is computed?
10. What is the industrial pollution?

PART B (5 x 16 = 80 Marks)

11. a) (i) Explain in detail about the phenomena which cause the global atmospheric change. (8)
(ii) What is the Ozone layer? And explain its significance on the global environment. (8)
(OR)
b) What are natural cycles of environment? and explain in detail about the carbon, water and nitrogen cycle to restore the nature's natural balance.
12. a) Discuss in detail about the air pollutants, its source, its effect on the people and environment and control methods of air pollutants.
(OR)
b) (i) Explain the issues in controlling of air pollution. (8)
(ii) What is the necessity of controlling of air pollution? Explain the different methods adopted to control the air pollution. (8)

13. a) (i) Explain the different types of water pollution. (8)
(ii) Discuss about the different types biological, organic and inorganic impurities in a polluted water. (8)

(OR)

- b) Explain in detail about the different stages of treatment of sewage water.

14. a) (i) Write down the basic techniques of energy recovery from Municipal solid waste. (8)
(ii) Explain reuse and recycling of waste. (8)

(OR)

- b) (i) What are the characteristics of a hazardous solid waste? (8)
(ii) Discuss the collection and disposal of waste. (8)

15. a) (i) What is the effect of oil pollution on the environment? (10)
(ii) Write the differences between air and noise pollution. (6)

(OR)

- b) (i) Name the different pollutants in Tannery effluent. (6)
(ii) Explain the noise pollution and its effects on medical care workers and patients in hospitals. (10)
