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Register Number:

7206

Name of the Candidate:

DIPLOMA EXAMINATION, 2010
(INDUSTRIAL POLLUTION AND CONTROL)
(PAPER-I)

111. ENVIRONMENTAL CHEMISTRY

Dec]

[Time : 3 Hours

Maximum : 100 Marks

Answer any FIVE questions

(5×20=100)

1. a) Explain in detail any two environmental segments. (10)
b) Discuss briefly the chemical process which are responsible for the formation of inorganic particulate pollutant matter in the atmosphere. (10)
2. a) How is ozone formed and depleted in nature? Discuss the significance of ozone depletion? (10)
b) Write briefly about Radio-Nuclide in the environment. (10)
3. a) How air pollutants are classified? (5)
b) Mention the sources of important air pollutant. (5)
c) Discuss the control measures of air pollution. (10)
4. a) Write short notes on
i) Deforestation (ii) Burning of fossil fuels (iii) vehicular missions
(iv) rapid industrialisation (4×4=16)
b) State the different forms of air pollutants. (4)
5. a) How water pollutants are classified? (8)
b) Write a note on disease causing wastes. (8)
c) Mention the characters of waste water. (4)
6. Discuss the basic principles and processes for the following waste treatment process.
(i) Coagulation (ii) Ion exchange (iii) Evaporation (iv) Electro-dialysis (4×5=20)
7. What are the characteristics of municipal solid waste generated in India? Discuss the various methods adopted to treat the solid waste. (20)
8. Discuss in detail the biochemical effects of cyanides, pesticides and catcinogemic compounds. (20)
9. a) How will you monitor the ground water contamination by Halides and Heavy metals? (10)
b) Briefly explain the biosensor based method for the measurement of p^H. (10)
10. Explain the methodology / experimental technique followed for the estimation of the following (i) chloride (ii) zinc (iii) Iron (iv) copper. (4×5=20)
