



B.E DEGREE EXAMINATIONS: JUNE 2015

(Regulation 2009)

Fifth Semester

CHY107: ENVIRONMENTAL SCIENCE AND ENGINEERING

(Common to AERO/ECE/EIE)

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. Lithosphere is the sphere of
 - a) Air
 - b) Water
 - c) Rocks/soil
 - d) Ocean
2. Example for primary source of energy
 - a) Petrol
 - b) Fossil fuels
 - c) Electrical energy
 - d) Nuclear energy
3. What is the approximate TDS of distilled water
 - a) <10 ppm
 - b) 10-100 ppm
 - c) 100-500 ppm
 - d) 500-1000 ppm
4. WWF is
 - a) World Wide Food
 - b) World Wealth Fund
 - c) World Wide Fund for Nature
 - d) World Wide Fund for Forests
5. Smog is a mixture of
 - a) Smoke and mist
 - b) Smoke and fog
 - c) Smoke and PAN
 - d) Smoke and CFC
6. Dioxin is the result burning of
 - a) Wood
 - b) Plastics
 - c) Coal
 - d) Nuclear waste
7. Which of the following gases has major contribution to enhance greenhouse effect?
 - a) CFC
 - b) CH₄
 - c) CO₂
 - d) N₂O
8. Which article in constitution recognizes environmental protection as one of the fundamental duties of every citizen of India?

- b) (i) 'India is a mega diversity nation'- Justify with facts and figures. (8)
(ii) Distinguish *in situ* and *ex-situ* conservation of biodiversity. (6)
23. a) (i) Name any six air pollutants. Explain the working of 'Electro Static Precipitator' for air pollution control with diagram. (7)
(ii) Suggest a well planned solid waste management plan for your city, to convert waste to wealth. Explain with diagram and flow chart. (7)
- (OR)**
- b) (i) Define decibel (dB). List any three noise pollution hazards along with control measures. (6)
(ii) Draw and explain a disaster management plan to encounter 'Earth quake' using flow chart. Suggest any three remedial measures. Indicate recent incident. (8)
24. a) (i) How will you conserve water by water harvesting in home and water shed management in hill areas? Draw necessary diagram and advantages. (8)
(ii) Explain the salient features of 'Wildlife Protection Act, 1972' (6)
- (OR)**
- b) (i) Deduce the various reactions involved in acid rain and write its impacts on life and property. (7)
(ii) What are green house gases? Explain any four impacts that lead to global warming. (7)
25. a) (i) Compare the population of India, USA and Japan from 1960 to 2010. Draw 'Population by Age' graph and explain. Predict for the next 50 years. (7)
(ii) What is HIV? Write detail note on its possible origin, causes, prevention and treatment. (7)
- (OR)**
- b) (i) Justify the role of 'Information technology in environment and human health' with real time case studies. (8)
(ii) Comment on 'Human Rights'. As an Indian citizen, explain your fundamental rights. Give any incident of human rights violation in your area. (6)
