

Registration no:

--	--	--	--	--	--	--	--	--	--

Total Number of Pages: 2

B.Tech
HSSM3303

6th Semester Regular / Back Examination 2016-17
ENVIRONMENTAL ENGINEERING AND SAFETY

BRANCH: BIOTECH

Time: 3 Hours

Max Marks: 70

Q.CODE: Z412

Answer Question No.1 which is compulsory and any five from the rest.
The figures in the right hand margin indicate marks.

- Q1 Answer the following questions: (2 x 10)**
- a) Name some Green House gases present in the atmosphere.
 - b) What is the formula to calculate frequency rate (F.R) of accident in industrial plant?
 - c) What are Lechate and land fill gas?
 - d) What are the most commonly used industrial scale disinfectants?
 - e) What are Pretreatment processes?
 - f) In EIA study what is Public hearing?
 - g) What are the two common types of reactors in waste water treatment?
 - h) What are the features of Environmental Protection Act?
 - i) What are the most commonly used industrial scale disinfectants?
 - j) Give some Examples of PPE
- Q2 a) Define Break Point Chlorination. (2)**
- b) Explain the different stability conditions in the atmosphere with respect to ideal lapse rate with the help of a diagram? (8)**
- Q3 a) What is temperature Profile Diagram of the Atmosphere? Explain it with the diagram. (5)**
- b) Draw the flow diagram of Waste Minimization (WM) Technique. (5)**
- Q4 a) What is Environmental Gradient? Draw the Universal tolerance curve for different levels of environmental factors. (5)**
- b) Calculate the Mean sound power level of four sound power levels of 38dB, 51dB, 68dB & 78dB? (5)**

- Q5 a)** What are the objectives & benefits of OH & S management system? **(5)**
- b)** What are the safety precautions for preventing Electric Shock? **(5)**
- Q6 a)** Discuss the operation of Carbon cycle in nature involving the important steps in it. **(5)**
- b)** Mention the various environmental laws which have been enacted in our country to tackle environmental pollution. Name the statutory bodies dealing with various environmental laws in our country? **(5)**
- Q7** Give a classification of types of ecosystems with suitable examples. Explain the energy flow in an ecosystem as an ecosystem process with the help of an energy flow model. **(10)**
- Q8** **Write short answer on any TWO:** **(5 x 2)**
- a)** Fire Extinguishers
 - b)** Cyclone Separator
 - c)** Wind rose Diagram
 - d)** LPG Bottling plant