

Registration No :

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Total Number of Pages : 01

B.Tech
HSSM3303

6th Semester Back Examination 2018-19
ENVIRONMENTAL ENGINEERING AND SAFETY
BRANCH : AEIE, AERO, AUTO, BIOMED, BIOTECH, CHEM, CIVIL, ECE, EEE, EIE,
ELECTRICAL, ETC, IEE, MINERAL, MINING
Time : 3 Hours
Max Marks : 70
Q.CODE : F526

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) What is an ecological pyramid?
 - b) Define the Turbidity of water.
 - c) What is flocculation?
 - d) What do you mean by noise pressure level?
 - e) Give the relationship between ultimate BOD and COD of wastewater.
 - f) Differentiate between solid waste and hazardous waste.
 - g) What are environmental gradients?
 - h) Name the NO_x gasses.
 - i) Name two accidents that can occur in a steel industry.
 - j) Give the name of two Secondary air pollutants.
- Q2**
- a) Briefly describe about the gross physical properties of water. (5)
 - b) Discuss about the function of alum as a coagulant. (5)
- Q3**
- a) Define environmental gradient. Show how the environmental gradients decide the tolerance level with a neat sketch? (5)
 - b) A wastewater sample contains 100 mg/L ethylene glycol (C₂H₆O₂) and 120 mg/L phenol (C₆H₆O). Determine the COD and TOC. (5)
- Q4**
- a) What are biogeochemical cycles? Discuss about carbon cycle with a neat sketch. (5)
 - b) Briefly discuss about global warming. How is greenhouse effect related to it? (5)
- Q5**
- a) Define a food chain. Give a brief account of different type of food chain with a neat sketch. Discuss about food web. (5)
 - b) Define environment, ecology and ecosystem. Discuss about the component of ecosystem. (5)
- Q6** Define noise pollution. Discuss about the sources of noise pollution. Discuss about the effects of noise pollution on human being, plants and animals. (10)
- Q7** Give brief discussion on air pollution meteorology. (10)
- Q8** Write short answer on any TWO : (5 x 2)
- a) Land filling
 - b) Criteria air pollutants
 - c) Personal safety equipment
 - d) EIA