

COURSE CODE: 10B11GE411

MAX. MARKS: 45

COURSE NAME: ENVIRONMENTAL STUDIES

COURSE CREDITS: 3

MAX. TIME: 3 HRS

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.

Section A (9x1=9)

- Q1. (a) List the activities that should be part of an effective disaster mitigation program.
 (b) What is geothermal energy? How this energy can be used for energy generation in houses?
 (c) List the objectives and aim of an effective town planning scheme.
 (d) Differentiate among various classes of fire by giving suitable examples.
 (e) What is the vulnerability of India towards earthquakes, floods, landslides, cyclones and draught?
 (f) What is composting? What are the advantages of this technique?
 (g) Draw a typical cross-section of land fill.
 (h) What do you understand by term polluter-pays principle?
 (i) Mention components and their percentage in urban municipal solid waste for India.

Section B (13.5 marks)

- Q2. Explain the policy initiatives to mainstream energy efficiency and green buildings. (4.5)
 Q3. What is solid waste management? Mention its impacts, classification and disposal methods? (4.5)
 Q4. Mention the three R's of waste management? Discuss the various steps taken in all the three R's to manage the waste. (4.5)

Section C (22.5 marks)

- Q5. Discuss the typical energy consumption pattern in building using a pie chart. Discuss in detail, any four energy saving approaches which can be used in the construction of Green buildings. (6.5)
 Q6. Define contingency planning. What are the key elements of a contingency plan? With the help of flow chart, explain different models of a contingency planning process. (6)
 Q7. (a) What will be the maximum upper limit of BOD of Phenol (C_6H_6OH) solution of concentration 200 mg/l. (3)
 (b) If a sample has 300 ppm of Glucose ($C_6H_{12}O_6$). Calculate the COD. (2)
 Q8. (a) Classify the IUCN Red list categories. (3)
 (b) "Climate change is global issue." Justify the statement. (2)