

R16

Code No: 138CF

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year II Semester Examinations, July - 2021

GEOENVIRONMENTAL ENGINEERING

(Civil Engineering)

Time: 3 hours

Max. Marks: 75

**Answer any Five Questions
All Questions Carry Equal Marks**

1. Discuss the scope of Geoenvironmental Engineering with regard to present day scenario. [15]

2. Discuss classification of waste and write their characteristics. [15]

3. Explain the various terms associated in contaminant transport modeling. Discuss its limitations. [15]

4. What does contaminant transport and fate refer to? How do contaminants migrate or travel in groundwater? Discuss. [15]

5. Discuss the objectives of site remediation. Explain remediation of NAPL sites. [15]

6. What types of technologies can be used for site remediation? Explain the following:
a) Soil Washing.
b) Soil Vapor Extraction.
c) Thermal Desorption. [5+5+5]

7. List out various types of landfills and explain them briefly with neat sketches. Discuss the differences between engineered and non engineered landfills. [15]

8. Discuss the following:
a) Leachate collection system and
b) Cover system. [7+8]

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