

**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**

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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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