

**Roll No.**

**Total No. of Pages : 01**

**Total No. of Questions : 08**

**M.Tech.(Civil Engg.) (Sem.-1)**

# GEOENVIRONMENTAL ENGINEERING

**Subject Code : MTCE-204**

**M.Code : 74240**

**Date of Examination : 23-01-23**

**Time : 3 Hrs.**

**Max. Marks : 100**

**INSTRUCTION TO CANDIDATES :**

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries TWENTY marks.

1. Explain in detail various types of landfills their design and operations.
2. Explain in detail subsurface contamination control and remediation.
3. Discuss laboratory and field evaluation of permeability and various factors affecting permeability.
4. Explain in detail Barrier systems basic concepts and their design and construction.
5. Discuss in detail engineering properties, planning and design aspects relating to waste disposal in landfills.
6. Discuss in detail physical, chemical and biological characteristics of solid wastes.
7. What is the benefit of environmental monitoring around landfills and geotechnical reuse of waste material?
8. What do you understand by reclamation of old waste dumps and regulation related to it? Also, discuss waste containment principle.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**