

Roll No.

Total Pages : 02

MT/D-21

49077

ENVIRONMENTAL GEOTECHNOLOGY

MCG-113A

Time : Three Hours]

[Maximum Marks : 60

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

Unit I

1. Define soil-environment interaction. Write properties of water in relation to the porous media.
2. Explain the significance of mineralogy in determining soil behaviour.

Unit II

3. (a) Explain theories of ion exchange.
(b) What is the importance of force of attraction and repulsion ?
4. Explain soil-water contaminant interaction in detail.

Unit III

5. Explain the sources, production and classification of waste.

6. What are the contaminated site remediation ?

Unit IV

7. Explain the various terms :

- (a) Slurry wall and barrier systems
- (b) Risk assessment approaches.

8. (a) Explain gas permeation in soil.

- (b) Explain pore size distribution.