



Code: 9D12106a

M.Tech I Semester Regular & Supplementary Examinations January/February 2017

GEO-ENVIRONMENTAL ENGINEERING

(Geotechnical Engineering)

Time: 3 hours

Max. Marks: 60

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Draw a typical diagram of landfill with cover & liner and explain the mechanism involved.
(b) What is surface impoundment?
- 2 (a) What is site characterization and risk assessment?
(b) Explain steps involved in design of characterization study.
- 3 (a) What are the general characteristics of solid waste?
(b) Explain about the handling procedure involved in hazardous waste.
- 4 (a) How do nuclear wastes and biomedical wastes are processed before its disposal?
(b) Explain the impact of improper handling of chemical wastes.
- 5 (a) What are the various isotherms involved in establishing sorption characteristics?
(b) Explain the three contaminant transport phenomena.
- 6 Explain mechanism involved in mass transport and explain thoroughly about Abiotic processes.
- 7 (a) What is bioremediation? Explain the mechanism involved in bioremediation.
(b) What are the principle of NAPL entrapment of soils?
- 8 (a) What are the various functions of clay liner? List out merits and demerits of different clay liners.
(b) Explain soil bentonite liners.
