

LESSON PLAN

Semester: 8th

Subject: Environmental Geotechnique

Session: 2015-16

Theory/-Sessional

Branch/ Course: Civil Engineering/ B.Tech.

Name of the Faculty Member: Debabrata Giri

Period	Module/ Number	Topic to be covered	Remarks/ Sign. of Faculty Member
1	Module-I	Introduction and scope	
2		Importance of environmental management	
3		Waste generation	
4		types of waste and characteristics	
5		Contamination	
6		Subsurface contamination	
7		Contaminat Transport	
8		Problems Solving	
9		Effect of subsurface Contamination	
10		Geosynthetics types and manufacturing	
11		Application of geosynthitics and economical effect	
12	Module-II	Various forms of wastes	
13		Properties of wastes	
14		Minicipal waste	
15		Mineral waste	
16		Industrial waste	
17		Hazardous wastes and index properties	
18		Strength and compressibility	
19		Permeability of Municipal waste	
20		Permeability of mineral waste	
21	Module-III	Selection of waste disposal Sites	
22		Factors affecting site selection	
23		Siting criteria and sitting rate	
24		Solid waste contamination	

25		Landfill for hazardous waste	
26		Landfill for municipal waste	
27		Types of Landfill & Various components	
28		Various components	
29		Closure and post closure care	
30		Stability analysis of Landfill	
31		Stability analysis of Landfill slope	
32		Problems discussion	
33		Landfill construction and Operation	
34	Module-IV	Ash pond and mine tailing impoundments	
35		Slurry deposition of mine tailing	
36		Coal ash in impoundments	
37		Layout and components of tailing dam/ash dykes	
38		Ash pond slope stability	
39		Principle of remediation	
40		Planning and source control	
41		soil gas extraction	
42		soil washing	
43		Bioremediation	

Signature of Faculty Member:

Date:

Counter Signature of H.O.D.

