## Introduation to solid waste engineering

**Engineering** 



Analyze a solid waste disposal problem and design the individual components. Plan for overall handling of the solid waste management problem Integrate individual design elements as required by the ideal sanitary landfill system Mid-Term Examination Tests Assignment 25% Mini Design Project and Presentation Final Examination 50% Solid waste can be defined as: The useless and unwanted products in the solid state derived from the activities of and discarded by society. It is produced by-product of production processes or arise from domestic or commercial sector when objects or materials are discarded after use

Any scrap material or other unwanted surplus substance or rejected products, arising from application of any process Any substance required to be disposed of as being broken, worn out, contaminated or otherwise spoiled Any other material that is required by the authority to be disposed of A material is disposed of it is : Discharged, deposited, injected, dumped, spilled, leaked or placed into or any land or water so that such material or any constituent thereof may enter the environment or be emitted into the air or discharged into groundwater or surface water.

Garbage : The term given principally to food waste, but may include other gradable organic waste Rubbish : Consists of combustible and non combustible solid waste, excluding food wastes. 3. Refuse The collective term for solid waste (both garbage and rubbish) 4. Litter : Odds and ends, bits of paper, wrapping materials, bottles etc. 5. Others : - Sludge from wastewater treatment plant - discarded solid from industrial, commercial, mining and agricultural operation e. . Waste tires, scrap metal, furniture, toys, construction and demolition debris, empty cans, paints, appliances, glass, plastics et Biodegradable waste : Food and kitchen waste, green waste Recycled material : Paper, glass, bottles cans, metals, plastics Inert waste Construction and demolition waste, dirt, rocks, debris. Composite wastes waste clothing, waste plastics.