

## SECTION - 5

Qn. (3)

Ans. - (A) Waste Screening:

(1) Waste screening is the essential operation of all solid waste treatment plants.

(2) Screen are used for achieving efficient separation of particles through dependence on differences between particle size with respect to any two dimension.

(3) Nowadays, screening an essential part of waste management and it enables the recovery and recycling of valuable materials as well as the preprocessing of waste to fuel, such as the derived coal (RDF), for instance.

(b) Screening Equipments:- Following are the various screening equipments used for solid waste screening.

(1) Drum Screens:

(i) A drum screen is a mechanically robust reliable and easy to use machine as it has only a few



moving parts. Also the fuel consumption is low, making a drum screen a viable choice for car dash waste types:

(ii) As the structure of the machine is simple it is also affordable and easy.

## (2) Disc Screens

(i) Disc screens are capable of screening almost any material, and they are particularly good for waste processing.

(ii) Application of disc screens are almost limitless - wood, municipal solid waste (MSW), industrial and commercial waste, as compost, ash, metals, refuse-derived fuel (RDF), car duff, tires, aggregates, and so forth.

(iii) In addition a disc screen takes less space than a drum screen.



### (3) Vibrating Screens

- (i) Vibrating screens have rather elevated and specific uses they are mainly used to screen aggregates. In addition, vibrating screens are rather expensive.
- (ii) They are not as versatile as other screening solutions and they have relatively high fuel consumption.