## JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT TEST -3 EXAMINATIONS- 2023

## PhD -I Semester

COURSE CODE (CREDITS): 14M31CE115 (3)

MAX, MARKS: 35

COURSE NAME: Solid Waste Management

COURSE INSTRUCTORS: Dr. Rishi Rana Kalia

MAX. TIME: 2 Hours

Note: (a) All questions are compulsory.

- (b) Marks are indicated against each question in square brackets.
- (c) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems
- Q.1 Mention the field investigations associated with waste stream assessment?

[3 Marks] (CO-1)

Q.2 Using a neat flow sketch, explain the different components of solid waste management?

[7 Marks] (CO-1&2)

- Q.3 Discuss the different recycling processes for metals, glass and plastics? [6 Marks] (CO-3)
- Q.4 Discuss the public and environmental effects of solid waste management? [7 Marks] (CO-4)
- Q.5 Explain the factors that affect the selection of "air separation equipment". In this context, with neat sketch critically explain "conventional chute type separator". [6 Marks] (CO-3)
- Q.6 In context of leachate formation, explain the following (a) composition and properties, (b) leachate migration, (c) leachate treatment. [6 Marks] (CO-3&4)