Exam.Code:0006 Sub. Code: 17581

#### 2055

# B.A./B.Sc. (General) Sixth Semester Industrial Chemistry Paper - B: Waste Recycling

Time allowed: 3 Hours Max. Marks: 75

**NOTE:** Attempt <u>five</u> questions in all, including Question No. IX (Unit-V) which is compulsory and selecting one question each from Unit I - IV.

x-x-x

### **UNIT-I**

- 1. Write complete notes on the following.
  - (a) Flocculation
  - (b) Sedimentation
  - (c) Fuel palletization

(5,5,5)

2. Discuss in detail physical and biological treatment techniques used for waste water treatment. (15)

### **UNIT-II**

- 3. Write notes on the following.
  - (a) Electrodialysis
  - (b) Centrifugation
  - (c) Filtration (5,5,5)
- 4. Discuss the following in detail.
  - (a) Advanced oxidation processes
  - (b) Oil refineries (7,8)

### **UNIT-III**

- 5. Discuss the following in detail.
  - (a) Trickle filters
  - (b) Electrostatic precipitation (7,8)
- 6. Explain the following.
  - (a) Bag filters
  - (b) Wet/dry grid arrestors (7,8)

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(2)

## **UNIT-IV**

7. Write complete notes on the following.

(a) Heavy chemicals

(b) Slaughter houses

(8,7)

8. (a) Discuss economics of recycling of waste.

(b)Discuss briefly Iron and steel plants.

(6,9)

# **UNIT-V**

9. Attempt the following in brief.

(a) Incineration

(b) Coagulation

(c) Activated sludge process

(d) Microbial degradations

(4,4,4,3)