

- Q.27 Explain waste water recovery by membrane separation.
- Q.28 Discuss forth floatation technique for plastic waste separation.
- Q.29 Discuss ISI standards regarding limit of these chemicals in effluents.
- Q.30 Explain various stages of plastic recycling.
- Q.31 Write a short note on Landfill of plastic.
- Q.32 Define Pollution. Explain the toxic chemicals produced from plastic.
- Q.33 Write the advantage and disadvantage of Re-processing.
- Q.34 Explain Importance of plastic segregation.
- Q.35 Explain cause of air and water pollution related to the plastic.

#### **Section-D**

- Note:** Long answer Questions. Attempt any two Questions out of three Questions. (2x10=20)
- Q.36 Explain recycling plant with the help of flow chart and also explain role of each part.
- Q.37 Discuss:
- Rain water harvesting
  - Energy recovery from plastic wastes.
- Q.38 Write short note on :
- Value addition by plastic wastes.
  - Agents used for increasing life expectancy of polymers.

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**6th Sem / Plastic Engineering**  
**Subject : Pollution control in Plastic Industry**

Time : 3 Hrs.

M.M. : 100

#### **SECTION-A**

**Note:** Multiple choice questions. All questions are compulsory. (10x1=10)

- Q.1 PET stands for \_\_\_\_\_.
- Polyethylene Tere-phalte
  - Polyethylene Tere-phthalate
  - Polyethlene Tetro-phthalte
  - None of them.
- Q.2 Which of the following materials is non-biodegradable.
- Plant waste
  - Paper
  - Plastic
  - Yard waste.
- Q.3 \_\_\_\_\_ is the process of recycling raw materials to carry new product.
- Reducing
  - Re-processing
  - Re-cycling
  - Composting
- Q.4 Name of waste management technique.
- Disposal
  - Recycling
  - Landfills
  - All of these

- Q.5** The three main categories of waste include municipal solid waste, hazardous waste, and :  
a) Industrial waste      b) Radioactive wastes  
c) Green waste      d) Waste water
- Q.6** Refuse collected by municipalities from households, small businesses, and institutions.  
a) Waste stream      b) Leachate  
c) MSW      d) None of them
- Q.7** Which of the following gas is produced from landfill wastes?  
a) Biogas  
b) Natural gas  
c) Liquified petroleum gas  
d) All of the above
- Q.8** \_\_\_\_\_ is any waste that is a risk to the health of humans or other living things.  
a) Hazardous      b) Non-hazardous  
c) Political      d) None of these
- Q.9** Halogens are used as \_\_\_\_\_ in plastic.  
a) Flame Retardant      b) UV light absorber  
c) Antimicrobial      b) Antistatic agents
- Q.10** What is the recycling number of PET.  
a) 1      b) 5  
c) 4      d) 6

### Section B

- Note:** Objective types Questions. All Questions are compulsory. ( $10 \times 1 = 10$ )
- Q.11** Density of ABS is \_\_\_\_\_ g/cc.
- Q.12** \_\_\_\_\_ is an example of synthetic polymer.
- Q.13** The recycling number of PET is \_\_\_\_\_.
- Q.14** Pyrolysis is done at \_\_\_\_\_ °C.
- Q.15** Name two major source of water pollution.
- Q.16** B.O.D. sands for \_\_\_\_\_.
- Q.17** Name two sources of soil pollution.
- Q.18** Define Natural Polymer.
- Q.19** Name two toxic chemicals used in Plastic processing.
- Q.20** \_\_\_\_\_ films are used canal linings.

### Section-C

- Note:** Short answer type Questions. Attempt any twelve Questions out of fifteen Questions. ( $12 \times 5 = 60$ )
- Q.21** Discuss “Tertiary Technique” of plastic recycling.
- Q.22** State process of energy recovery from plastic wastes.
- Q.23** Write short note on “Proper disposal of plastics.”
- Q.24** Discuss life expectancy of different plastics in environment.
- Q.25** Explain various techniques for collection of plastic wastes.
- Q.26** Discuss the utilization of woven sacks wastes of plastics into various other form.