

- Q.28 Explain flammability test for plastics
- Q.29 Explain end group analysis for plastics.
- Q.30 Discuss concept of statistical quality control
- Q.31 Write procedure for thermal expansion test for plastics
- Q.32 Discuss creep and stress relaxation phenomenon in plastics.
- Q.33 Explain Rockwell hardness test.
- Q.34 Discuss tear test for plastic films.
- Q.35 Explain different types of sampling method.

#### SECTION-D

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Write burning test for identification of:
- PVC
  - ABS
  - Nylon
  - Urea formaldehyde
- Q.37 Write equipment and standard procedure of testing for:
- Falling weight impact test
  - Shear strength of plastics
- Q.38 Explain
- Various test performed on Universal testing machine
  - Group detection test

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#### 4th Sem / Plastic Subject:- Plastic Testing - I

Time : 3Hrs.

M.M. : 100

#### SECTION-A

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

- Q.1 In a Charpy test, high hammer velocity ensures \_\_\_\_\_.
- High strain rate
  - Local stresses
  - Ductility in fracture
  - Low stress concentration
- Q.2 Which of the following is optical property?
- Haze
  - Gloss
  - Refractive index
  - All of them
- Q.3 ASTM D2240 is the standard for \_\_\_\_\_ test.
- Tensile test
  - Rockwell hardness test
  - Durometer hardness test
  - Brinell hardness test
- Q.4 What is the full form of UTM?
- Universal test method

- b) Urea test method
  - c) Universal testing machine
  - d) Unlimited test method
- Q.5 ASTM D1238 is the standard for\_\_\_\_\_ test.
- a) Tensile test                      b) Flexural test
  - c) flame test                      d) MFI
- Q.6 Which plastic material softened on heating but does not drips.
- a) HIPS                                  b) PVA
  - c) ABS                                  d) All of these
- Q.7 ASTM D790 is the standard for\_\_\_\_\_ test.
- a) Tensile test                      b) Flexural test
  - c) flame test                      d) MFI
- Q.8 WVT stands for\_\_\_\_\_
- a) Waste vapour test
  - b) Water vapour Transmission
  - c) Water value test
  - d) None of these
- Q.9 MFI value indicated in\_\_\_\_\_
- a) g/1min                              b) g/100min
  - c) g/10min                              d) None of these
- Q.10 Creep is a \_\_\_\_\_ dependent phenomenon.
- a) Temperature                      b) Time
  - c) Load                                  d) Stress cycle

## SECTION-B

**Note:** Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Give ASTM standard for thermal conductivity test\_\_\_\_\_.
- Q.12 Expand DIN.
- Q.13 Poly olefins generally have\_\_\_\_\_ feel when touched.
- Q.14 PE burns with\_\_\_\_\_ flame.
- Q.15 Name two optical properties of polymer.
- Q.16 PVC is self-extinguishing in nature. (True or False)
- Q.17 PS gives \_\_\_\_\_ smell.
- Q.18 Expand VSP.
- Q.19 SQC stands for\_\_\_\_\_.
- Q.20 Define Histogram.

## SECTION-C

**Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 How will you measure moisture contents in Plastics?
- Q.22 Explain HDT test for plastics
- Q.23 Explain VSP test and its importance.
- Q.24 How testing helps in improving the quality of product.
- Q.25 Discuss templates and punching.
- Q.26 How will you measure melt flow index of plastics?
- Q.27 Explain any one pendulum impact testing method.