

- Q.32 Explain short note on ESCR test.
  - Q.33 How will you carry out the HDT test on plastic sample?
  - Q.34 Explain oxygen index test in detail.
  - Q.35 Explain various short term mechanical properties.

No. of Printed Pages : 4  
Roll No. ....

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**4th Sem.  
Branch : Plastic  
Sub.: Plastic Testing-I**

Time : 3 Hrs.

M.M. : 100

## **SECTION-D**

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

- Q.36 Write short note on

  - a) Cone & Plate rheometer
  - b) Cutting and milling

Q.37 Define hardness test. Explain Rockwell hardness test and shore hardness test for plastic materials.

Q.38 Discuss volume and surface resistivity test of plastics material.

## **SECTION-A**

- Q.1 Unit of relative viscosity is  
a) m/s b) Unit less  
c) Both A & B d) None

Q.2 To check the grade of plastic material by  
a) MFI b) DSC  
c) HDT d) None

Q.3 Dart impact test is applicable for films  
a) True b) False  
c) Cannot say d) None

Q.4 Teflon is a \_\_\_\_ material  
a) Thermoset b) Thermoplastic  
c) Both A & B d) None

Q.5 Engineering plastic is an example  
a) HDPE b) LDPE  
c) PP d) Nylon 66

- Q.6 Modulus of rupture or bending is known as  
 a) Flexural strength  
 b) Yield strength  
 c) Compressive strength  
 d) None
- Q.7 ASTMD-1238 is a standard of  
 a) DSC                      b) MFI  
 c) Tensile strength        d) Arc resistance
- Q.8 The minimum thickness of plastic specimen for testing of tensile strength is  
 a) 1mm                      b) 2mm  
 c) 3mm                      d) 4mm
- Q.9 Positioning of specimen in charpy test is  
 a) Vertical                b) Horizontal  
 c) Parallel                d) None
- Q.10 Rockwell test is used for  
 a) Harness                b) Burst test  
 c) Arc resistance        d) None of these

### **SECTION-B**

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

- Q.11 Write Example of specialty plastics.  
 Q.12 Define drop test.

- Q.13 Define quality.  
 Q.14 Expand TGA.  
 Q.15 Define refractive index.  
 Q.16 Name the solvent of polystyrene.  
 Q.17 Expand ISI.  
 Q.18 Expand DSC.  
 Q.19 Define six sigma.  
 Q.20 Define specific gravity.

### **SECTION-C**

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

- Q.21 Write the test procedure for compressive strength test.  
 Q.22 Write the test procedure to measure arc resistance test.  
 Q.23 Write down difference between conductor and insulator.  
 Q.24 Write short note on abrasion resistance test.  
 Q.25 Define milling operation for test specimen.  
 Q.26 Explain water absorption of plastics.  
 Q.27 Explains different types of sampling plans.  
 Q.28 Explain capillary rheometer.  
 Q.29 What are the purposes of standardization?  
 Q.30 Write short note on specific gravity test.  
 Q.31 Explain the need of statistical quality control.