

SECTION-D

No. of Printed Pages : 4
Roll No.

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Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 Discuss :

- a) ESCR test
- b) Rockwell-Hardness test

Q.24 Write short note on :

- a) Volume and surface resistivity
- b) Creep and stress relaxation

Q.25 Discuss :

- a) Abrasion resistance test
- b) Smoke density test

4th Semester/ Plastic Technology Subject : Plastic Testing & Quality Control

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 The property of a material which enables it to absorb energy and deform plastically without fracture is _____

- a) Stiffness
- b) Toughness
- c) Hardness
- d) Resilience

Q.2 ASTM stands for _____.

- a) American Society for Tensile Measurement
- b) American Society for Testing and Materials
- c) American Society for Tool Measurement
- d) American Society for Tensile Material

Q.3 Deformation that occurs due to stress over a period of time is known as _____.

- a) Wear resistance
- b) Fatigue
- c) Creep
- d) Fracture

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Q.4 ASTM D1238 is the standard for _____ test.

- a) Tensile test b) Flexural test
- c) Flame test d) MFI

Q.5 Unit of M.F.I. Test _____.

- a) g/1min b) g/100 min
- c) g/10min d) None of these

Q.6 ASTM D2240 is the standard for _____ test.

- a) Tensile test
- b) Rockwell hardness test
- c) Durometer hardness test
- d) Brinell hardness test

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 Give full name of M.F.I. test.

Q.8 What is observed when PVC subjected to flame?

Q.9 PE burns with _____ flame.

Q.10 Give two solvents for PS.

Q.11 BIS stands for _____.

Q.12 Define Haze.

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Explain Gloss test.

Q.14 Discuss light transmittance test.

Q.15 Explain moisture absorption test.

Q.16 Explain Dart Impact Test for films.

Q.17 Explain basic concept of statistical quality control.

Q.18 Explain Melt flow index test for plastics.

Q.19 Explain Kaizen, three sigma and 5S process controls.

Q.20 Discuss test procedure for Arc resistance test.

Q.21 Explain HDT test for plastics.

Q.22 Discuss flame test for identification of plastics (Any four)