Q.25 What is DSC? Where it is used.

Q.26 Explain test specimen preparation for tensile testing machine.

Q.27 Name four tests performed on plastics sheets.

Q.28 Give visual examination test for PE and ABS.

Q.29 Explain moisture absorption test.

Q.30 Discuss Six-sigma technique for quality control analysis.

Q.31 Discuss flame test for PMMA and Melamine formaldehyde.

Q.32 Explain end group analysis for plastics.

Q.33 Explain compression test for plastics.

Q.34 Discuss abrasion resistance test for plastics.

Q.35 Explain Rockwell hardness test for plastics.

SECTION-D

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

Q.36 Discuss:

a) Kaizen technique for statistical quality control

b) Melt flow index testing for plastics.

Q.37 How will you measure hardness of plastics material? Explain various tests to measure Hardness in case of plastics.

Q.38 Explain with neat sketch, various types of pendulum impact test with standard -specifications.

No. of Printed Pages : 4 182244

Roll No. .....

4th Sem / Plastic Engineering

Subject:- Plastic Testing - I

Time : 3Hrs. M.M. : 100

SECTION-A

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

Q.1 The tendency of a deformed solid to regain its actual proportions instantly on unloading of force is known as_____

a) Perfectly elastic b) Delayed elasticity

c) Inelastic effect d) Plasticity

Q.2 Which plastic material softened on heating but does not drips.

a) HIPS b) PVA

c) ABS d) All of these

Q.3 ASTM D790 is the standard for_____ test.

a) Tensile test b) flexural test

c) flame test d) MFI

Q.4 _____ is the change in length per unit of the original length.

a) Stress b) Density

c) Viscosity d) Strain

Q.5 MFI value indicated in_____.

a) g/1min b) g/100min

c) g/10 min d) None of these

Q.6 The ability of materials of develop a characteristic behaviour under repeated loading known as_____.

a) Toughness b) Resilience

c) Hardness d) Fatigue

Q.7 In a charpy test, high hammer velocity ensures _____.

a) High strain rate

b) Local stresses

c) Ductility in fracture

d) Low stress concentation

Q.8 What is the approximate ratio of fatigue strength to the tensile strength?

a) 1:2 b) 1:3

c) 1:4 d) 2:1

Q.9 ASTM D2240 is the standard for_____ test.

a) Tensile test

b) Rockwell hardness test

c) Durometer hardness test

d) Brinell hardness test

Q.10 Which plastic material burns with fishy smell?

a) UF b) PF

c) Polyethylene d) MF

SECTION-B

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

Q.11 Define bulk density

Q.12 Give ASTM standard for fatigue bending test_____.

Q.13 Expand DIN.

Q.14 ASTM D2240 is the standard test number for _____ test.

Q.15 Which type of flame is observed when polyvinyl chloride burns?

Q.16 The weight of melt in grams flowing through the capillary in 10 minutes is the _____.

Q.17 TGA stands for_____.

Q.18 Expand FTIR.

Q.19 Name two tests required for testing of pipes.

Q.20 PVC gives_____odour, when burned

SECTION-C

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

Q.21 Discuss the importance of pareto-charts as quality control tool?

Q.22 How will you measure moisture contents in plastics.

Q.23 Define creep and stress relaxation.

Q.24 Explain fatigue bending resistance test and its importance.