## **SECTION-C**

**Note:**Long answer type questions. Attempt any three questions. 3x10=30

- Q.3 Explain test procedure for measuring
  - a) Tensile strength
  - b) Tensile modulus & elongation
- Q.4 Explain test procedure for measuring. Refractive index.
- Q.5 Explain test procedure for measuring vicat softening point.
- Q.6 Explain test procedure for measuring gloss.
- Q.7 Write about dynamic mechanical analysis.

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122242

### 4th Sem. / Plastic

# Subject : Plastic Testing Characterization and Quality Control

Time: 3 Hrs. M.M.: 100

#### **SECTION-A**

**Note:** Very Short Answer type questions. Attempt any 15 parts. (15x2=30)

- Q.1 a) What is the full form of ASTM.
  - b) What is the full form of BIS.
  - c) What is the density of PP.
  - d) Define creep.
  - e) Define young modulus.
  - f) Define stress.
  - g) Define gloss.
  - h) Define viscosity.
  - Name two long term mechanical properties.

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122242

- j) What is the full form of MFI.
- k) Define compressive strength.
- I) PVC is self extinguisher Yes or No.
- m) What is the ASTM number of tensile strength.
- n) What type of flame is observed when PE burns.
- o) What is the refractive index of glass.
- p) Define surface resistivity.
- q) Define templates.
- r) Define toughness.

## **SECTION-B**

**Note:** Short answer type questions. Attempt any ten parts 10x4=40

- Q.2 i) Write down the procedure for measuring compression strength.
  - ii) Write down the test procedure for measuring Izod impact strength.
    - (2) 122242

- iii) Define surface resistivity.
- iv) Explain cone and plate rheometer.
- v) What are the objective of slandardization.
- vi) Write down the test procedure for measuring Arc resistance.
- vii) What is specimen? How will you make specimen from sheet and film.
- viii) Write down the test procedure for measuring moisture content analysis.
- ix) Define dielective strength.
- x) Give the colour and odour of acrylics while burning.
- xi) Define rheology.
- xii) Draw the neat and labelled sketch of hazemeter.
- xiii) Give the three basic angles of incidence used for specular gloss measurement of plasticparts.
- xiv) Define milling operation for test.
- xv) Explain different type of sampling.

(3) 122242