

# AMPTE21 PLASTICS TESTING TECHNIQUES-I

## UNIT-1 CONSIDERATION OF IMPORTANCE OF TESTING FOR IDENTIFICATION OF PLASTICS

- 2.1 Determination of necessary manufacturing conditions
- 2.2 Assessment of properties of finished products in relation to service requirements.

## UNIT-2 STANDARD AND SPECIFICATIONS

- 2.1 National and International standards-BIS, ASTM, ISO & NABL.

## UNIT-3 IDENTIFICATION OF COMMON PLASTICS

- 3.1 Materials by simple tests e.g., visual inspection, density,
- 3.2 Effects of heat, combustion and solvents, analysis with common solvents.

## UNIT-4 PRECONDITIONING AND TEST ATMOSPHERE

- 4.1 Testing of Mechanical properties.
- 4.2 Thermal properties.
- 4.3 Optical properties.

## UNIT-5 TESTING OF ELECTRICAL PROPERTIES

- 3.1 Permeability Properties and Rheological properties.

### References Books:

1. Brown; Paul F (Ed), Hand Book of Plastics Test Methods, Longman Scientific and Technical, Harlow (1988).
2. Shah, Vishnu, Hand Book of Plastics Testing Technology, John Wiley and Sons, SPE Monograph (1984).
3. Blythe; A. R., Electrical Properties of Polymers, Cambridge University Press, Cambridge (1979).