**Printed Pages: 3** 

**NMT-013** 

# (Following Paper ID and Roll No. to be filled in your Answer Books)

Paper ID : 141663

Roll No.

#### B.TECH.

# Theory Examination (Semester-VI) 2015-16 PLASTIC MATERIAL & MANUFACTURING

Time: 3 Hours Max. Marks: 100 Section-A Attempt all the question  $(10 \times 2 = 20)$ 1. Explain the following: Alloys (a) (b) Thermoplastic high performance polymer (c) (d) Amorphous (e) Glass transition temperature (f) dielectric strength (g) **Engineering Plastics** (h) cross linked

(1) P.T.O.

- (i) Elastomer
- (j) Number Average molecular weight

#### Section-B

## 2. Attempt any five

 $(10 \times 5 = 50)$ 

- (a) Write any two methods which is used to determine the molecular weight of polymer?
- (b) Describe the properties and application of polypropylene?
- (c) Write is resole? Explain in detail.
- (d) Explain the optical properties of plastic?
- (e) Explain the properties and application of polyacetate?
- (f) Explain the effect of glass transition temperature on properties of polymer?
- (g) Discuss various type of gates in moulds?
- (h) Discuss the different process variable in extrusion molding?

#### Section-C

## Attempt any two:

 $(15 \times 2 = 30)$ 

- 3. Explain the importance of testing? Describe the mechanical testing of polymer?
- 4. Discuss the process of injection molding for plastic with neat sketch?

5. Write a detail note on processing of thermo sets by com-

