

## **SECTION-D**

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

- Q.23 Explain various calendering defects and their remedies. (Alteast 5 defects)
- Q.24 Explain extrusion of pipes and sheets process with neat sketch.
- Q.25 Explain Multi-layer blown films process with neat sketch.

No. of Printed Pages : 4

Roll No. ....

222231

3rd Sem.

**Branch : Plastic Technology  
Sub.: Plastic Processing Techniques-I**

**Time : 3 Hrs.**

**M.M. : 60**

## **SECTION-A**

**Note: Multiple type Questions. All Questions are compulsory. (6x1=6)**

- Q.1 Which of the following is not an important factor of cooling in extrusion?
- Reduction in shrinkage
  - Reduction in distortion
  - Ease of adding colours
  - Rate of cooling
- Q.2 Calendering is mostly suited for making PVC..
- True
  - False
  - Neither A nor B
  - Both A & B
- Q.3 Which of the following equipment is used for controlling the temperature of polymer material in the extrusion process?
- Thermo resister
  - Thermometer
  - Thermocouple
  - Glass tube

- Q.4 In which of the following a die is used  
 a) Compression moulding  
 b) Injection moulding  
 c) Extrusion moulding  
 d) All of the above
- Q.5 What is the function of breaker plate in extrusion?  
 a) Breaking the screen blocking  
 b) Breaking the consistency  
 c) Converting spiral flow to linear flow  
 d) Breaking the polymer chain
- Q.6 Coating of electrical wires is done with  
 a) Compression moulding    b) Injection moulding  
 c) Extrusion moulding      d) All of the above

### **SECTION-B**

**Note:** Objective/Completion type questions. All questions are compulsory.  $(6 \times 1 = 6)$

- Q.7 Which media is used to blow the film?
- Q.8 How the film is cooled in vertical upward blown film extrusion process?
- Q.9 Which instrument is used to measure thickness of film?

- Q.10 Name various materials used in multi layer packaging.
- Q.11 Extrusion is a \_\_\_\_\_ process.
- Q.12 \_\_\_\_\_ is the remedy for uneven thickness defect in pipes.

### **SECTION-C**

**Note:** Short answer type Questions. Attempt any eight questions out of ten Questions.  $(8 \times 4 = 32)$

- Q.13 Explain Take-Off devices used in extrusion.
- Q.14 Give four defects and their remedies for extrusion process.
- Q.15 Explain L/D ratio and its significance.
- Q.16 Briefly explain types of screws used in extrusion.
- Q.17 Discuss advantages and disadvantages of coextruded sheets and pipes.
- Q.18 Discuss advantages of calendering over extrusions.
- Q.19 Define the need of stretching and orientation in extrusion.
- Q.20 Discuss the use of vented barrel extruder.
- Q.21 Write short note on cutting devices used in extrusion.
- Q.22 Write short note on embossing and printing.