B.Tech. Seventh Semester (Polymer (Plastic) Technology) (CGS)

11134 : Polymer Processing - I : 7 PP 01

P. Pages : 2 | AW - 3383

Time : Three Hours | Max. Marks : 80

Notes :
1. Answer **three** question from Section A and **three** question from Section B.
2. Due credit will be given to neatness and adequate dimensions.
3. Diagrams and chemical equations should be given wherever necessary.
4. Discuss the reaction, mechanism wherever necessary.
5. Illustrate your answer necessary with the help of neat sketches.

SECTION – A

1. a) What do you mean by Injection molding? Explain with sketch, nomenclature of injection molding. **7**

b) Explain Injection molding cycle. **7**

OR

2. What is the principle of Injection molding? Explain in detail Injection and clamping unit of injection molding machine. **14**

3. a) How will you judge the quality of injection molded product on the basis of appearance of product. **7**

b) Explain in detail feed system of I.M. machine. **6**

OR

4. a) Explain in detail injection molding of thermosetting materials. **7**

b) What is the effect of material properties on the quality of injection molding articles. **6**

5. a) What do you mean by compression molding? Explain equipments used in compression molding. **7**

b) Explain compression molding cycle. **6**

OR

6. Explain in detail. **13**
a) Radiofrequency preheater. b) SMC & DMC.

SECTION – B

7. a) What do you mean by transfer molding? Explain in detail plunger transfer molding. **7**

b) Compare compression molding with transfer molding. **7**

OR

8.	a)	Explain in detail feed system in transfer molding.	7
	b)	Explain in detail different materials used in T.M.	7
9.	a)	What do you mean by roto molding? Explain in detail different machines used in it.	7
	b)	Explain in detail RIM.	6

OR

10.		Explain in detail i) Film casting. ii) Lamination & it's types.	**13**
11.	a)	What do you mean by recycling? Explain different types of recycling.	7
	b)	Explain in detail biodegradation.	6

OR

12.	a)	What do you mean by recycling? Explain methods of separation of plastics.	7
	b)	Explain pyrolysis process.	6

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