

Enrolment No. _____

M.E –IIst SEMESTER–EXAMINATION – JULY- 2012

Date: 10/07/2012

Time: 10:30 am – 13:00 pm

Total Marks: 70

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

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| Q.1(A) | Define the term Mixing. How mixing is affected in a Two roll mill?
Explain its working with suitable sketch. | (07) |
| Q.1(B) | Discuss in detail about working of Internal Mixer. | (07) |
| Q.2(A) | Discuss the types of Calender Rolls & its configurations and also explain the processing parameters of Calender Rolls. | (07) |
| Q.2(B) | Discuss in detail about Trouble shooting in Calendering process. | (07) |

Q.2(B)	Write about the advantages & applications of Calendering Process.	(07)
Q.3(A)	Discuss in detail about Heating Elements of Extruder Machine.	(07)
Q.3(B)	Write the advantages & disadvantages of Rotational Moulding.	(07)

Q.3(A)	Describe in detail about Different parts of Extruder.	(07)
Q.3(B)	Discuss the Fundamental Differences between the Single Screw Extruder & Twin Screw Extruder.	(07)
Q.4(A)	Discuss the importance of Compression Moulding in Polymer Processing. List the advantages, limitations and applications of it.	(07)
Q.4(B)	Write briefly on the development of Injection Moulding Process.	(07)

Q.4(A)	Explain the Principles of Blow Moulding. Write the basic need of it & also discuss the different methods for Blow Moulding.	(07)
Q.4(B)	Define Transfer moulding. Giving a neat sketch, explain the working of a transfer mould.	(07)
Q.5(A)	Explain in detail about Sulphur Vulcanisation in Rubber Compounding.	(07)
Q.5(B)	Give the comparison between Thermoforming & Injection Moulding process.	(07)

Q.5(A)	Discuss in detail about Vulcanisation Conditions.	(07)
Q.5(B)	List the different techniques of Thermoforming. Write the advantages & disadvantages of Thermoforming techniques.	(07)

A horizontal line consisting of 15 circles connected by equals signs (=). The circles are arranged in a single row, and the equals signs are placed between each pair of adjacent circles.