Seat No.:	Enrolment No.
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Subject code: 2142603

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER- IV(NEW) EXAMINATION - SUMMER 2015

Date:05/06/2015

-	ame: Rubber Engineering		
		30am-1.00pm Total Marks:	70
Instr	uctio		
		Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a)	Discuss types of calendar with their roll configurations.	07
Q.1	(b) i ii	Answer the following Define the given terms: (i) Doubling (ii) Embossing (iii) Profiling Write down the main sources of potential danger, typical sources of accidents and methods of guarding for single daylight press and multi daylight press respectively.	
Q.2	(a)	Discuss in detail about the major components of extruder with their functions.	07
Q.2	(b) i ii	Answer the following Write down the limitations of transfer mix. How the flash of vulcanizate is removed by low temperature tumbling? OR	03 04
Q.2	(b) i ii	Answer the following Write a brief note on extruder as a strainer. How the flash of vulcanizate is removed by punching and trimming respectively?	03 04
Q.3	(a)	Compare the performance of mixing mill with internal mixer.	07
Q.3	(b) i ii	Answer the following Explain the given features with respect to internal mixer (i) Rotor Speed (ii) Drive Arrangement In mixing mill, front roll is rotated at lower speed than back roll-why?	05
Q.3	(a)	OR Discuss the problems associated with mixing process.	07
Q.3	(b) i ii	Answer the following Differentiate the banbury mixer and Shaw Intermix List out the major components of kneader.	04 03
Q.4	(a)	Explain the compression moulding process.	04
Q.4	(b) i ii	Answer the following Write down the advantages and disadvantages of transfer moulding. Write a short note on mould cleaning methods. OR	05 05

Q.4	(a)	Discuss the types of transfer moulding process.	07
Q.4	(b)	Answer the following	
	i	Write down the advantages and disadvantages of compression moulding process.	04
	ii	Define the term mould releasing agent. Excess usage of mould releasing agent is not preferable-why?	03
Q.5	(a)	Answer the following	
	i	Write down the causes and remedies for blooming.	03
	ii	Write about plasticizing unit of injection moulding machine.	04
Q.5	(b)	Discuss the guidelines for press selection.	07
		OR	
Q.5	(a)	Answer the following	
	i	Write down the causes and remedies for flash.	03
	ii	Write about the clamping unit of injection moulding machine. Also give	04
		the features of ideal clamping unit.	
Q.5	(b)	Discuss the classification of hydraulic press.	07
