Seat No.:	
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## GUJARAT TECHNOLOGICAL UNIVERSITY M. E. - SEMESTER - I • EXAMINATION - WINTER • 2014

	•	code: 712503N Date: 03-12-2014	
•		0:30 am - 01:00 pm Total Marks: 70	
Ins	1. 2.	tions: Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a)	Enumerate the latest developments in modern winding machines. Analyze in detail various drive systems.	09
	<b>(b)</b>	Discuss briefly the setting of clearer curve on to winding machines EYC.	05
Q.2	(a) (b)	"It is said that better warping is half sizing" Justify the statement.  Write in detail on developments in sectional warping with reference to cone angle and traverse rate.	07 07
	<b>(b)</b>	OR With sketch explain automatic leasing device as available on modern warping machines.	07
Q.3	(a)	Enlist various factors affecting the choice of size mixture. Write briefly on effect of hairiness on selection of size mixture.	09
	<b>(b)</b>	What is the effect of total ends to be sized on design of size box?  OR	05
Q.3	<ul><li>(a)</li><li>(b)</li></ul>	Examine requirements out of weft yarn to be supplied to shuttleless looms. Write in details on features of weft yarn feeders with reference to weft velocity. How weft yarn length is controlled with negative picking type shuttleless looms?	09 05
Q.4		Write short note on following:  1. Relay nozzles  2. Flow through nozzles  OR	14
Q.4		With reference to performance of yarns in air jet insertion, discuss effect of following:  1. Yarn Structure 2. Yarn count 3. Twist and Ply	14
Q.5	(a) (b)	What are the factors limiting the wider use of water jet looms?  Discuss in detail special applications of projectile weaving machines.  OR	05 09
Q.5	(a) (b)	Analyze the stresses on warp and weft yarn during rapier weaving. Explain any one application of modern weaving machines for manufacture of technical textile.	07 07

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