## GUJARAT TECHNOLOGICAL UNIVERSITY

M. E. - SEMESTER – I • EXAMINATION – WINTER 2012

<b>Subject</b>	code	e: 712503N Date: 12-01-20	Date: 12-01-2013	
		ne: Modern Weaving Technology		
		pm - 05.00 pm Total Marks:	70	
Instruc	tion	S:		
		empt all questions.		
		ke suitable assumptions wherever necessary.		
3.	Figu	ures to the right indicate full marks.		
Q.1	(a)	How would you ascertain quality of warp and weft to be used for shuttleless looms? Give examples wherever necessary.	07	
	<b>(b)</b>	•	07	
Q.2	(a)	What are the causes of warp and weft breaks on an air jet loom?	07	
	<b>(b)</b>	Discuss various equations with reference to drag force acting on the air jet loom.	07	
		OR		
	<b>(b)</b>	Explain with a suitable graph force and acceleration of projectile.	07	
Q.3	(a)	What are the different settings possibilities for width adjustment on rapier looms? Also write in short on any two modern features of rapier loom.	07	
	<b>(b)</b>	What is meant by QSC? How it is useful? How it is exercised on modern looms?	07	
		OR		
Q.3	(a)	How nozzles on the air jet loom are set? Explain for main and relay nozzles.	07	
	<b>(b)</b>	Draw the timing diagram of any modern relay nozzle type air jet loom.	07	
Q.4		<ul> <li>Write short note on following.</li> <li>i) Cycle of projectiles on projectile loom</li> <li>ii) Shedding and beating on multiphase loom</li> </ul>	14	
Q.4		Write on quality of water to be used on water jet loom. With a neat sketch explain working of picking mechanism of modern water jet loom.	14	
Q.5		With a neat sketch explain working of multi color weft feeder on projectile.	14	
		OR		
Q.5		<ul> <li>Write short note on following</li> <li>i) Design of rapier heads for negative type rapier loom.</li> <li>ii) Quality of air for air jet looms.</li> </ul>	14	

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