Seat No.: _____ **Enrolment No._____**

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VII (NEW) - EXAMINATION – SUMMER 2017

Subject Code: 2172902 **Date: 29/04/2017**

Subject Name: Modern Weaving Technolgy

Time: 02.30 PM to 05.00 PM **Total Marks: 70**

Instructions:

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

Q.1	**(a)**	Explain and Compare beat-up mechanism of Projectile loom with that of ordinary shuttle loom.	**07**
	(b)	Explain various types of weft supply packages used on shuttleless looms and their requirements.	**07**
Q.2	**(a)**	Give classification of Rapier looms.	**04**
	(b)	Explain with neat diagram principle of working of flexible double rapier tip transfer weft insertion system.	**10**
		OR	
	(b)	Discuss in detail with the help of neat diagrams different types of Selvedges formed on shuttleless looms.	**10**
Q.3	**(a)**	State the advantages of Multiphase loom over single phase loom.	**04**
	(b)	With the help of neat diagram, explain the beat-up mechanism of M8300 Multiphase loom in detail.	**10**
		OR	
Q.3	**(a)**	State the importance of weft tensioners used on shuttleless looms.	**04**
	(b)	With the help of neat diagram explain different stages of operation of circulation of gripper on Projectile weaving machine in detail.	**10**
Q.4	**(a)**	Discuss in detail the principle & benefits of Wet-in-wet (wet size sow box).	**06**
	(b)	Discuss in detail the traverse aids for maintaining air flow in Air Jet weaving.	**08**
		OR	
Q.4	**(a)**	Highlight the innovations in the area of Beam drive in Warping machine.	**08**
	(b)	What are the limitations of Water jet looms?	**06**
Q.5	**(a)**	Discuss in detail the functional characteristics of modern air-jet weaving machines.	**10**
	(b)	Discuss pre-requisites of Water Jet Loom.	**04**
		OR	
Q.5	**(a)**	Discuss the essential requirements for successful air jet weft insertion.	**10**
	(b)	Write in brief about Propack in relation with Autoconer winding machine.	**04**

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