

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII(NEW) EXAMINATION – SUMMER 2019****Subject Code:2172902****Date:10/05/2019****Subject Name:Modern Weaving Technology****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.

			MARKS
Q.1	(a)	State different types of weft accumulators used in shuttleless looms.	03
	(b)	Give the comparison between Profile reed & Confuser.	04
	(c)	With the help of neat diagram, explain the torsion bar mechanism of Sulzer projectile loom in detail.	07
Q.2	(a)	Discuss in brief about requirements of Selvedges.	03
	(b)	Discuss the importance of 'Short Quick Blast' of air from nozzle in Air jet loom.	04
	(c)	Enlist the Quick Style Change features available on modern shuttle less looms. Discuss any one in detail.	07
OR			
Q.3	(c)	With the help of neat diagram, explain the let-off mechanism of Sulzer projectile loom in detail.	07
	(a)	Enlist the channels normally employed to measure accurately & individually the yarn faults & eliminate in yarn clearer.	03
	(b)	What are the limitations of rapier loom w.r.t. width changes? Which changes are required on loom when the width is to be changed?	04
Q.3	(c)	With the help of neat diagram, explain double rapier tip transfer type weft insertion system in detail.	07
OR			
Q.3	(a)	Give the principle of Wet-in wet sow box.	03
	(b)	State some of the important areas of applications of rigid rapier looms.	04
	(c)	Explain picking mechanism of M8300 Multiphase loom with the help of neat diagrams.	07
Q.4	(a)	Give principle of Fluid jet looms.	03
	(b)	Discuss merits & demerits of water jet weaving machines.	04
	(c)	Write short note on: Projectile.	07
OR			
Q.4	(a)	Water & air jet are not competitor but complementary to each other. Justify.	03
	(b)	Write in brief about Autotense FX.	04
	(c)	With neat diagram explain main stages of weft insertion in Water jet loom.	07
Q.5	(a)	Enlist the uses of Triaxial fabrics.	03
	(b)	Enlist the factors that influence filling insertion rate and machine speed in air jet weaving.	04
	(c)	Discuss the yarn quality requirement for shuttle less weaving.	07
OR			
Q.5	(a)	Monofilament yarns are not suitable for air jet weaving machine. Give reason.	03
	(b)	What are the main functions of Weft supply system on Water jet loom?	04
	(c)	With a neat diagram explain the Picking system on Water jet weaving machine.	07