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

GUJARAT TECHNOLOGICAL UNIVERSITY

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

Subject Code: 2162907 **Date: 05/05/2017**

Subject Name: Weaving Technology-III

Time: 10:30 AM to 01:00 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		**Short Questions**	**14**
	1	Classify automatic shuttle looms.	
	2	State any two types of mechanical weft feelers.	
	3	Capacity of magazine of cop change loom is _____pirns.	
	4	Weaving speed is _____than winding speed on loom winder. (Less or More)	
	5	_____ seconds are required to replace the shuttle in case of stop type shuttle change loom.	
	6	State different types of terry mechanisms.	
	7	Figures are created by using _____yarn in case of madras muslin fabrics.	
	8	Length of weft yarn in a bunch of pirn is about _____times the width of loom.	
	9	_____ number of valves are used to operate bobbin loader.	
	10	Cop change loom is preferred for _____ material.	
	11	How many pattern cylinders are there in SLSC jacquard ?	
	12	Define warp ondule fabric.	
	13	_____type of shed is formed by DLDC jacquard.	
	14	Photo electric type of weft feeler is preferred for _____material.	
Q.2	**(a)**	Compare cop change with shuttle change looms.	**03**
	(b)	With the help of neat diagram, explain the working of diameter gauge type of mechanical feeler in detail.	**04**
	(c)	With the help of neat diagrams, explain different types of harness ties used in jacquard shedding mechanism.	**07**
		OR	
	(c)	With the help of neat diagram, explain the working of cop change mechanism in detail.	**07**
Q.3	**(a)**	State the requirements for efficient working of cop change looms.	**03**
	(b)	With the help of neat diagram, explain the shuttle eye weft thread cutter in detail.	**04**
	(c)	Explain the working of stop type shuttle change mechanism in detail with the help of neat diagram. Also, state some of the important settings of the said mechanism.	**07**
		OR	
Q.3	**(a)**	Calculate the production of a loom in meters/shift of 8 hours if the loom speed is 180 rpm, efficiency % = 79 and picks/inch = 56.	**03**
	(b)	Compare bobbin loader with loom winder in detail.	**04**
	(c)	With the help of neat diagram, explain loose reed type terry mechanism in detail. State the arrangement in the said mechanism to change the loop height.	**07**

Q.4	**(a)**	State the objects of let-off mechanism.	**03**
	(b)	State and explain the requirements for weaving of blended and filament yarns.	**04**
	(c)	With the help of neat diagram, explain the working of any one let-off mechanism in detail. Also, state some of the important settings of the said mechanism.	**07**

OR

Q.4	**(a)**	State some of the requirements for weaving of swivel fabrics.	**03**
	(b)	Compare madras muslin fabrics with lappet fabrics.	**04**
	(c)	With the help of neat diagram, explain the mechanism used for lifting and lowering of needle bars in lappet loom. Also, state the function of pin bar provided in lappet loom.	**07**
Q.5	**(a)**	State the requirements for production of leno fabrics.	**03**
	(b)	With the help of neat diagram, explain the working of electrical warp stop motion in detail.	**04**
	(c)	With the help of neat diagram, explain the principle of working of leno mechanism in detail.	**07**

OR

Q.5	**(a)**	State some of the important parts of jacquard.	**03**
	(b)	State and explain the principle of working of electronic jacquard in detail.	**04**
	(c)	With the help of neat diagram, explain the mechanism used for driving the pattern cylinder of single lift single cylinder jacquard.	**07**

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