

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII (NEW) EXAMINATION – SUMMER 2024****Subject Code:3172911****Date:24-05-2024****Subject Name:Knitting 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.
4. Simple and non-programmable scientific calculators are allowed.

		MARKS
Q.1	(a) Enlist the characteristics of Single Jersey Structure.	03
	(b) Explain the following with proper diagrams: i. Tuck Stitch ii. Float Stitch	04
	(c) With suitable sketches explain loop formation steps for the latch needle.	07
Q.2	(a) Give features and properties of Rib fabric.	03
	(b) Explain with a structure how Chain or Pillar stitch is formed.	04
	(c) Explain with neat sketches the knitting cycle on a Tricot machine.	07
	OR	
	(c) With suitable sketches explain loop formation steps for the Spring beard needle.	07
Q.3	(a) Explain in brief the types of motion of Guide bar.	03
	(b) Describe Reverse Locknit structure by the thread diagram & the lapping movements of the two guide bars.	04
	(c) Explain how patterns can be produced by using a 'Pattern Wheel' mechanism on the Circular Knitting machine.	07
	OR	
Q.3	(a) Enlist the uses of Tricot fabric.	03
	(b) Write the function of Swing cam. With suitable sketch show various settings.	04
	(c) Draw thread diagram and graphical representation of Atlas lap.	07
Q.4	(a) Draw a thread diagram for Purl structure.	03
	(b) What are the reasons for the growth of the Indian knit garment industry.	04
	(c) Discuss in detail manufacturing of Net fabric.	07
	OR	
Q.4	(a) What is Barreness in knitted fabrics?	03
	(b) Discuss in brief about important yarn properties required for Warp knitting.	04
	(c) With a suitable sketch, describe flat bed knitting machine and its important parts.	07
Q.5	(a) Enlist disadvantages of Raschel machine.	03
	(b) Discuss the construction and advantages of Compound needle.	04
	(c) Give classification of Warp Knitting machines.	07

OR

- Q.5**
- (a)** Give comparison of Warp and Weft knitting. **03**
 - (b)** Give major differences between Tricot and Raschel Warp knitting machine. **04**
 - (c)** With suitable sketches explain the steps followed in the knitting cycle of the Raschel warp knitting machine. **07**
