

Enrolment No./Seat No_____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER– VII EXAMINATION – SUMMER 2026

Subject Code:3172911

Date:01-06-2026

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) Give the classification of weft knitting.	03
	(b) Define the following terms: (i) Loop, (ii) stitch length, (iii) Sinker loop, and (iv) Needle loop.	04
	(c) Give the comparison between knitting and weaving process.	07
Q.2	(a) Discuss the important properties of interlock structure.	03
	(b) With a suitable sketch show the various parts of the sinker and write their functions.	04
	(c) With suitable sketches, explain the various steps involved in the knitting cycle of purl structure.	07
	OR	
	(c) With suitable sketches, explain the various steps involved in the knitting cycle of Rib structure.	07
Q.3	(a) Discuss the advantages and disadvantages of latch needle.	03
	(b) With a suitable sketch discuss the construction of the needle cylinder.	04
	(c) Draw thread diagram and its representation for tuck and float stitches. Also, discuss the effect of tuck and float stitches on fabric properties.	07
	OR	
Q.3	(a) Discuss the characteristics of a plain knit structure.	03
	(b) Draw a diagram of a swing cam showing the settings for tuck, float, and knit stitches.	04
	(c) Discuss the different types of defects in knitted fabric and their remedial measures.	07
Q.4	(a) Discuss the advantages and disadvantages of the spring beard needle.	03
	(b) With a suitable sketch show the various parts of the spring beard needle and write their functions.	04
	(c) Give the comparison between Raschel and Tricot warp knitting machine.	07
	OR	
Q.4	(a) Discuss the warp preparation for warp knitting.	03
	(b) Discuss the latest technical development relative technology (Relanit) for circular knitting machines.	04
	(c) With suitable sketches, explain the various steps involved in the knitting cycle of the Raschel warp knitting machine.	07
Q.5	(a) Write the end uses of warp knitted fabric.	03
	(b) Briefly discuss the production of net structures.	04
	(c) Draw lapping diagrams for locknit, reverse locknit,sharkskin, and	07

queenscordwarp knitted structures.

OR

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| Q.5 | (a) Briefly discuss the glove knitting process. | 03 |
| | (b) With suitable sketches explain the swinging and shogging motion of guide bar. | 04 |
| | (c) Discuss the structure and properties of single guide bar fabric construction. | 07 |
