

Code No: 154CZ

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**B. Tech II Year II Semester Examinations, February - 2024****TECHNOLOGY OF KNITS AND NONWOVEN****(Textile Engineering)****Time: 3 Hours****Max. Marks: 75****Note:** i) Question paper consists of Part A, Part B.

ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.

iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

PART – A**(25 Marks)**

- 1.a) What are the main parts of a weft knitting machine? [2]
- b) Define: Feeder Density, Robbing Back. [3]
- c) Mark the design for Derby Rib. [2]
- d) What do you mean by Inter lock Gaiting? [3]
- e) What are the possible ways of arranging the carding machines for any Nonwoven production? [2]
- f) Why two or more guide bars are needed? [3]
- g) Explain the wet laying. [2]
- h) What is Melt Blown Nonwovens? [3]
- i) How do you vary DPN? [2]
- j) What is structured Needling? [3]

PART – B**(50 Marks)**

2. How you are going to control yarn tension in weft knitting? Explain with an example. [10]

OR

3. Explain with a neat sketch the loop formation by Compound needle. [10]
4. Using Knit, tuck and Float develop needle diagram or Pin diagram for the following pattern, where Blank indicates third colour C. [10]

	A			B	A		A
	B	B		A	B		A
	A		B		B	A	
	A	B		A	A		B
A		A	B	B		B	

OR

5. Discuss the Knitting Dynamics. [10]

6. Draw and explain the needle diagram for: Long Sateen, Full width weft insertion, Fall patterned stictch. [10]
OR
7. Explain the working of Cross Lapper. [10]
- 8 Explain the Spinnabau machine? Explain. [10]
OR
9. How FERHER machine works? [10]
10. Discuss the production of 3D NWF. [10]
OR
11. Briefly explain about Thermal bonded technology. [10]

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