

Subject Code:3152909

Date:01/02/2021

Subject Name: Fabric Formation III

Time:10:30 AM TO 12:30 PM

Total Marks: 56

Instructions:

1. Attempt any FOUR questions out of EIGHT questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

	MARKS
Q.1 (A) Define nonwoven fabric.	3
(B) Explain leno weaving principle	4
(C) With the help of neat diagram, explain the torsion bar mechanism of Sulzer projectile loom in detail.	7
Q.2 (A) Compare rigid rapier with flexible rapier loom.	3
(B) State and explain different ways of classifying rapier looms.	4
(C) With the help of neat diagram, explain double rapier tip transfer type weft insertion system in detail.	7
Q.3 (A) What is braiding? Name different braiding technique.	3
(B) Discuss application of nonwoven fabric in Geotextiles	4
(C) Compare of different web bonding techniques.	7
Q.4 (A) Discuss application of nonwoven fabric in Automotive textiles.	3
(B) Define nonwovens. Give the sequence of operation followed for manufacturing of nonwovens.	4
(C) Discuss importance of fibre orientation for nonwoven fabric. How to measure it.	7
Q.5 (A) State different types of weft accumulators used in shuttleless looms.	3
(B) Compare rigid rapier with flexible rapier loom	4
(C) With a neat diagram explain the operation of Weft supply system on Water jet weaving machine.	7
Q.6 (A) Draw a loom-timing diagram of air jet loom.	3
(B) Explain weft insertion system of air jet weaving machine.	4
(C) What is leno selvage? Explain the working of leno selvage with neat diagram.	7
Q.7 (A) Discuss the application of nonwoven filters.	3
(B) Discuss the current market growth of nonwoven industry.	4
(C) Discuss the environmental application of nonwovens.	7
Q.8 (A) State the effects which may be achieved by Mechanical Finishing	3
(B) Discuss 3D woven fabric manufacturing technique.	4
(C) Discuss the any one polymer lay processes carried out in the Nonwoven web formation.	7
