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Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (Textile Engg.) (2011 Onwards) (Sem.-6)

KNITTING TECHNOLOGY

Subject Code : BTTE-603

M.Code : 71737

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A**1. Write briefly :**

- a) What is curling tendency in plain knits?
- b) What is the function of a verge?
- c) Define Needle timing and state its importance.
- d) If the stitch density of a wet relaxed knitted fabric is 86.4, estimate the courses/cm and wales/cm.
- e) Define Tightness factor.
- f) Give the structure of lacoste knit fabric.
- g) Highlight the advantages and disadvantages of latch needle.
- h) What is a guide bar and the different motions given to a guide bar?
- i) Define Robbing back factor.
- j) Why compound needle is the fastest of all the needles?

SECTION-B

2. How are interlock fabric manufactured? Describe its cam system.
3. Give the knitting cycle of Raschel knitting machine. Also compare the properties of Raschel and Tricot knit fabrics.
4. What are the fundamental stitches in knitting? What are their various characteristics and properties?
5. Describe the computer controlled patterning mechanism used for the ornamentation of simple knitted structures.
6. Calculate the length in 'meters' of a plain single jersey structure knitted at 20cpcm and 40 wpcm on a 30" diameter, 20 gauge machine having 120 feeders. The machine operates for 8 hours at 40 rpm and 95% efficiency. Also calculate the fabric width.

SECTION-C

7. Give the lapping diagrams of the following warp knitted structures :

QUEENSCORD
LOCKNIT
SATIN
SHARKSKIN
ATLAS
8. Describe the loop formation process in a V- bed flat knitting along with its cam system.
9. What are the properties of the yarn that affect the performance of the knitting machine and how?

NOTE : Disclosure of identity by writing mobile number or making passing request on any page of Answer sheet will lead to UMC case against the Student.