

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

**DEPARTMENT OF TEXTILE TECHNOLOGY
END OF SEMESTER EXAMINATIONS DECEMBER 2003
FABRIC TECHNOLOGY II TXT
TIME: 2 HOURS 30 MINS**

INSTRUCTIONS

Answer ALL questions from Section A and ANY THREE from section B. Section A carries 40 marks and each question in section B carries 20 marks. Allocate 60 minutes to section A and 90 minutes to section B

SECTION A

Answer ALL question in this section

1. With the help of figures, explain the difference between a loop and a stitch.
(4 marks)
2. Which two needles is used in weft knitting? Why is one more popular than the other?
(4 marks)
3. Explain how the shogging movement is initiated in warp knitting. (3 marks)
4. During knitting elements section which tow steps are involved? Explain methods employed for the second tasks.
(8 marks)
5. Explain the fig below. What to variations of this setting can be obtained.
Illustrate
(8 marks)
6. Illustrate the knitting procedure of an atlas knit with closed loops, open loops.
Draw the illustrated structure.
(8 marks)
7. (a) What is the importance of the knitting direction on any circular knitting
(3 marks)
(b) Why are the knitting yarn cones fled from the side of the machines.
(2 marks)
8. Discuss how warping yarn for a warp knitting machine should be done for easy usage. Give an example.
(6 marks)

9. Use figures to explain the production of a (i) miss stitch
(ii) luck stitch
10. Which positions are occupied by the needle to achieve a couple knitting cycle in a single jersey machine. (6 marks)

SECTION B

- 1 (a) explain the following canne system with reference to the machine and its knitting structure produces. (10 marks)
- (b) With the aid of diagrams, explain how loop transfer is achieved on a straight bar machine (10 marks)
2. (a) Discuss Needle timing in a rib machine. (8 marks)
- (b) Describe how needles are electronically selected. Use figures.
3. What is involved in computer graphics pattern preparation. (20 marks)
4. (a) Use a diagram to explain the arrangement of knitting elements having full mechanical selection (12 marks)
- (b) Explain how knitting is achieved on purl or links-links machine illustrate. (8 marks)

END OF QUESTION PAPER