

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF TEXTILE TECHNOLOGY

SUP EXAMINATIONS – 2011

FABRIC STRUCTURE AND PROPERTIES TXT 2117

TIME: 3 HOURS

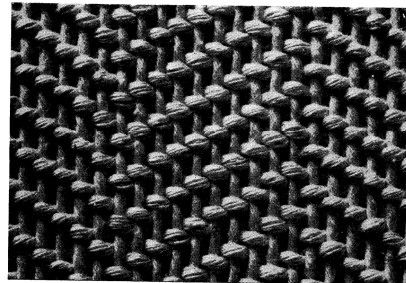
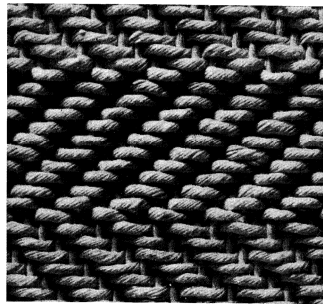
INSTRUCTIONS

Answer Five questions. All questions carry 20 marks

Section A:

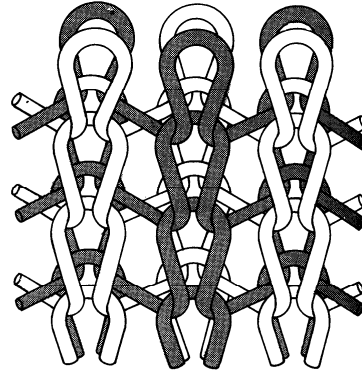
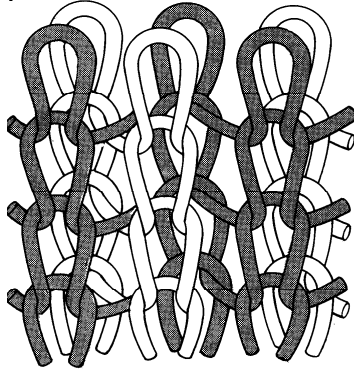
QUESTION ONE

Compare and contrast the production of the two structures below (*20marks*)



QUESTION TWO

Describe how the structures below differ in their production (*20 marks*)



QUESTION THREE

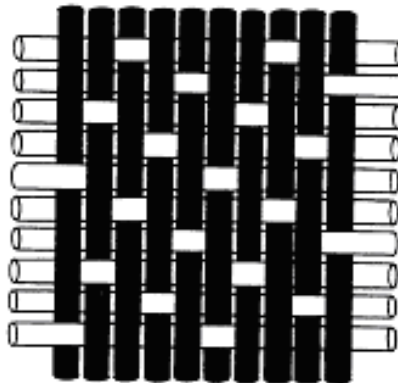
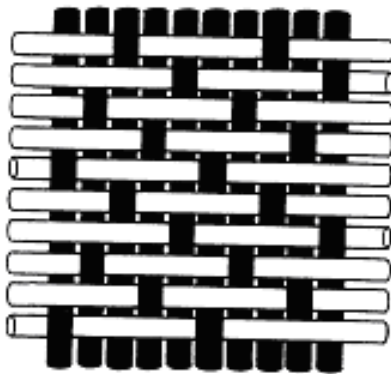
a) A sharkskin warp knit shirting is produced with 15 wales/cm and 40 courses/cm. The run in is 190 cm for the back bar and 110cm for the front bar, both bars being fed by 4.5 tex nylon 6.6 yarn. Calculate the areal density of the fabric in g/m^2 .

(10marks)

b) With the use of diagrams discuss the production of the terry weave (10 marks)

(10 marks)

QUESTION FOUR



In detail, compare and contrast the production of the two structures (20 marks)

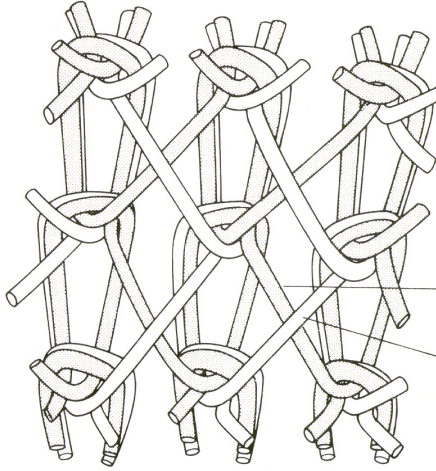
QUESTION FIVE

With the help diagrams to justify why each of the following properties is important for fabric durability (20marks)

- flexibility,
- elongation,

- abrasion resistance
- elastic recovery,

QUESTION SIX



Describe the movement of the guide bars that lead to the production of a double tricot knit of your choice and draw (20marks)

END OF EXAMINATION PAPER