The Open University of Sri Lanka
Faculty of Engineering Technology
Department of Textile and Apparel Technology

Study Programme	: Bachelor of Industrial Studies Honours
Name of the Examination	: Final Examination
Course Code and Title	**: TAX4441 Knitted Garment Technology**
Academic Year	: 2021/2022
Date	: 27th January 2022
Time	: 14:00-17:00
Duration	: 3 hours

General Instructions

1. Read all instructions carefully before answering the questions.

2. This question paper consists of Eight (08) questions in Five (05) pages.

3. Write down your Index Number in all the pages of the answer script.

4. **Answer compulsory question one (Q1) and additional five (05) questions.**

5. Question one (Q1) is compulsory and carries twenty-five (25) marks.

6. Question two (Q2) to eight (Q8) carry fifteen (15) marks each.

7. Answer for each question should commence on a new page. If a question has many parts, all the parts should be answered in the chronological order under the same question.

8. Write down the answered question numbers in the space given in the answer book.

9. Answers should be in clear hand writing.

10. Do not use red colour pen.

(b) Describe how the fast-linking machine is different from the conventional linking machine used in the assembly of knitted fabrics. (07 Marks)

(Q6) (a) Describe how to determine the dimensional stability of knitted fabrics.

(06 Marks)

(b) Briefly describe the conditions required to achieve each of the four (04) main relaxation states in knitted materials. (04 Marks)

(c) Draw the point paper notation and yarn path diagram for the following loop diagram (Figure 1). (05 Marks)
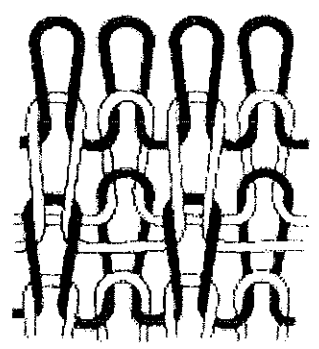

Figure 1

(Q7) (a) Compare the actions of the bearded, latch and compound knitting needles as they make knit stitches. (07 Marks)

(b) Draw the lapping diagrams for the fully threaded guide bar movements represented by the following chain notations of Fabric A and Fabric B. Compare the properties and appearance of the technical front and back of each fabric.

- Fabric A – Front bar chain notation : 1-2/1-0
  Back guide bar chain notation : 1-0/1-2
- Fabric B – Front bar chain notation : 2-3/1-0
  Back guide bar chain notation : 1-0/1-2

(08 Marks)

(Q8) A fully fashioned garment component with the following specification is required to be knitted.

Courses per inch = 40

Wales per inch = 25

The requirements are given in the diagram below.

Do the calculations and write the knitting statements. Clearly show all the calculation steps. (15 Marks)