

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



Study Programme	: Bachelor of Technology Honours in Engineering/ Bachelor of Industrial Studies Honours
Name of the Examination	: Final Examination
Course Code and Title	: TTX4238/ TAX4538/TAX4540 Garment Manufacture
Academic Year	: 2019/2020
Date	: 10 th October 2020
Time	: 1330-1630hrs
Duration	: 3 hours

General Instructions

1. Read all instructions carefully before answering the questions.
2. This question paper consists of **Eight (8)** questions in three **(3)** pages.
3. Write down your Index Number in all the pages of answer scripts.
4. Answer the question one (Q1), which is compulsory and five (05) more questions from Q2 to Q8. Question one (Q1) carries 25 marks and questions two (Q2) to eight (Q8) carry fifteen (15) marks each.
5. Answers to 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.
6. Write down the answered question numbers in the answer book.
7. Answers should be in clear hand writing.
8. Do not use red colour pens to write the answers.

Compulsory Question

- (Q1) (a) Denim fabrics are washed by using two (02) popular methods to obtain special effects. Name these two (02) methods. (02 marks)
- (b) Write down the three (03) major items required for screen printing. (03 marks)
- (c) Name the two (02) major functions of packaging. (02 marks)
- (d) Write down four (04) advantages of rolled fabric packages. (04 marks)
- (e) During the moulding process of fabrics, certain dimensions/characteristics of the fabrics are changed. Give four (04) of them. (04 marks)
- (f) Mention four (04) advantages of preparing operational breakdowns in garment manufacture. (04 marks)
- (g) Give four (04) details required to perform a proper operational breakdown in garment manufacture. (04 marks)
- (h) Draw front and back views of a belt loop made by using stitch type 406. (02 marks)

Answer any five (05) questions from the following seven (07) questions

- (Q2) (a) Compare "Manual spreading" and "Machine spreading" of fabrics in all aspects. (10 marks)
- (b) "Cutting process can cause lot of quality issues to the cut panels". Briefly discuss the given statement with examples. (05 marks)
- (Q3) (a) Discuss the principle, advantages and disadvantages of the "Die cutting process" of fabrics. (09 marks)
- (b) Briefly discuss the concepts of new cutting techniques (bladeless) used in fabric cutting. (06 marks)
- (Q4) (a) Explain the concept of "Toyota production system of garment manufacture". (08 marks)

- (b) Draw a possible machine layout for Toyota production system of garment manufacture, when the number of machines and sewing machine operators in the production system is 20 and 7 respectively. Name the important items in the drawn machine layout. (07 marks)
- (Q5) (a) Describe the operational principle of the "Unit production system" of garment manufacture. (09 marks)
- (b) Discuss the advantages and disadvantages of the "Unit production system" over the traditional methods of garment manufacture. (06 marks)
- (Q6) (a) Prepare an operational breakdown for assembling a shirt, when the completed front panels, back panel, collar and sleeves are provided. Include the buttonholing and button attaching processes in the operational breakdown as well. (09 marks)
- (b) Describe the preparation of the one-piece fused collar for short sleeve shirt. You should explain the process with the help of diagrams for each operation. The process should be completed in six operations. (06 marks)
- (Q7) (a) Discuss the purposes and the advantages of the following pressing processes.
- (i) Under pressing
 - (ii) Off- pressing (10 marks)
- (b) Briefly explain the issues you may face due to selection of incorrect pressing conditions/parameters. (05 marks)
- (Q8) (a) Write a comprehensive note on the properties and characteristics of good packing materials. (09 marks)
- (b) Briefly describe three (03) methods, you can use to remove or cover stains from grey fabrics. (06 marks)

