

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



Study Programmes	: Bachelor of Technology Honours in Engineering/ Bachelor of Science Honours in Engineering/ Bachelor of Industrial Studies Honours
Name of the Examination	: Final Examination
Course Code and Title	: TAX4540 Garment Manufacture
Academic Year	: 2022/2023
Date	: 11 th February 2024
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) Give four (04) important functions, a merchandizing packing should perform in relation to the consumers point of view. (04 marks)
- (b) Write down the three (03) popular methods of removing stains from grey fabrics. (03 marks)
- (c) List five (05) advantages of enzyme washing over the use of pumice stones in garment washing. (05 marks)
- (d) Write down five (05) problems associated with fusing of garment parts. (05 marks)
- (e) Name three (03) sewing machines, which are widely used in assembling knitted garment parts. (03 marks)
- (f) Mention five (05) requirements of fabric spreading process. (05 marks)

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

- (Q2) (a) Describe the operational principles of the below given cutting techniques.
- (i) Band knife
 - (ii) Die cutter
- (06 marks)
- (b) Compare the two (02) cutting techniques mentioned in part (a) of this question in relation to below given points.
- (i) Quality of cutting
 - (ii) Possible applications
 - (iii) Limitations of cutting
- (09 marks)
- (Q3) Write a comprehensive note on the "Straight line production system" by using the below given factors.
- (i) Preparation of bundles
 - (ii) Preparation of machine layouts
 - (iii) Required skill level of operators
 - (iv) Division of labour
 - (v) Work in Progress
- (15 marks)

(Q4) Providing necessary details, describe the operational principles of the below given production systems used in garment manufacture.

- (i) Section or Process system of garment manufacture (05 marks)
- (ii) Quick Response system of garment manufacture (05 marks)
- (iii) Toyota system of garment manufacture (05 marks)

(Q5) By using suitable diagrams, describe the stitching process of the below given parts of the shirt.

- (a) Stitching the two piece back yoke to the back panel of a shirt. It is necessary to construct two pleats in the stitching line as well. (06 marks)
- (b) Preparation of the left front panel of a shirt. Left front placket should be constructed by using a separate placket and fusible interlining. A patch pocket should also be attached to complete the construction. (09 marks)

(Q6) "Preparation of operational break downs provide lot of advantages in garment manufacturing." Discuss and justify the given statement by providing at least eight (08) relevant points. (15 marks)

(Q7) Write short notes on the following processes involved in garment manufacture.

- (i) Fusing (03 marks)
- (ii) Moulding (04 marks)
- (iii) Welding (03 marks)
- (iv) Pressing (05 marks)

(Q8) (a) Briefly explain the screen printing process used in garment manufacture. You should include the tools/equipment required and the steps of the printing process in your answer. (09 marks)

- (b) Briefly discuss the important properties and characteristics of films, which are widely used in packing of garments. (06 marks)

