

THE OPEN UNIVERSITY OF SRI LANKA
DEPARTMENT OF TEXTILE AND APPAREL TECHNOLOGY
DIPLOMA IN INDUSTRIAL STUDIES/APPAREL PRODUCTION AND
MANAGEMENT



TTI3239 - GARMENT ANALYSIS AND SEWING MACHINERY

121

FINAL EXAMINATION - 2007/2008

DURATION: THREE (03) HOURS

DATE: 22nd April 2008

TIME: 0930 TO 1230 HOURS

Total number of questions = 09

Number of questions to be answered = 06

Answer question one (Q1), which is compulsory and five (05) more questions.

Question one (Q1) carries 25 marks and questions two (Q2) to nine (Q9) carry fifteen (15) marks each.

Compulsory Question

- (Q1) (a) Classification of garments can be done by using different concepts. List four (04) of them. (04 marks)
- (b) State three (03) methods of garment analysis. (03 marks)
- (c) Name three (03) testing standards, which are widely used for testing of textiles and clothing in the world. (03 marks)
- (d) "Selection of seams or stitches for a particular product depends on many factors". List two (02) of them. (02 marks)
- (e) Briefly explain the advantages of using safety stitches in a particular seam. (03 marks)
- (f) List the stitch type and main applications of the twin needle bottom covering chain stitch. (03 marks)
- (g) Draw the French seam and state it's applications. (03 marks)
- (h) Explain why Teflon feet are used in sewing machines. (02 marks)
- (i) Write down two (02) automation devices and their tasks, which are common in modern sewing machines. (02 marks)

Answer any five (05) from the following eight (08) questions

- (Q2) Write a comprehensive note on the process of product development. (15 marks)

- (Q3) (a) Briefly discuss the factors, which affect the seam appearance of garments. (06 marks)
- (b) Write a short description about seam neatening methods. (09 marks)
- (Q4) (a) Formation of stitches can take place in three different methods. Name two (02) of them. (02 marks)
- (b) With aid of diagrams, briefly explain one of the methods of formation of stitches. (03 marks)
- (c) Discuss the properties and characteristics of the stitch type 301(single needle lock stitch) and 401(single needle multi thread chain stitch). (10 marks)
- (Q5) With aid of diagrams briefly explain the stitch formation process of stitch type 401. (15 marks)
- (Q6) (a) Explain the main task of the "Take up lever", "Needle", "Presser foot", "Stitch regulator" and "Feed dog" of a sewing machine. (05 marks)
- (b) Briefly explain why sewing machines with different types of sewing machine beds are used in garment manufacture. (10 marks)
- (Q7) (a) Briefly explain the four stage movement of the drop feed mechanism of a sewing machine. (07 marks)
- (b) Compare "Differential Drop feed" and "Unison feed" systems in all aspects. (08 marks)
- (Q8) (a) What are the benefits of using sewing machine attachments during sewing process? (05 marks)
- (b) Briefly explain the constrains in fully automating the sewing process. (10 marks)
- (Q9) (a) What is seam puckering (02 marks)
- (b) List the causes for seam puckering (03 marks)
- (c) Write a comprehensive note on "Seam Pucker due to Structural Jamming" (10 marks)