



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

TTI3239/TTD1239 - GARMENT ANALYSIS AND SEWING MACHINERY 051
FINAL EXAMINATION - 2006/2007
DURATION: THREE (03) HOURS

DATE: 29th March 2007

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.

Compulsory Question

- (Q1) (a) What do you mean by the terms “**fashion garments**” and “**staple garments**”? (04 marks)
- (b) State three (03) aspects of professional garment analysis. (03 marks)
- (c) Write down three (03) factors, you must consider, when selecting seams and stitches during product development process. (03 marks)
- (d) State two (02) methods of seam neatening. (02 marks)
- (e) Briefly explain the terms “**interlooping**” and “**intra-looping**”. (03 marks)
- (f) Write down two (02) characteristics of the stitch class 600. (02 marks)
- (g) Draw the enclosed seam and mention it's applications. (03 marks)
- (h) What is the diameter of the needle blade, if the needle size is “**80 Nm**”. (01 marks)
- (i) Write down two (02) advantages of automation of sewing process. (02 marks)
- (j) Name two (02) semi-automatic sewing machines. (02 marks)

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

- Q2) (a) Briefly explain the three (03) methods of garment analysis. (09 marks)
- (b) Briefly explain why garment manufacturing is a labour intensive industry. (06 marks)

- (Q3) (a) "Performance of the seam relates to the **elasticity, strength and flexibility** of the seam". Briefly discuss the above statement giving examples. (06 marks)
- (b) Write a short description about **seam defects** or **seam problems**, which affect the appearance of a seam and the performance. (09 marks)
- (Q4) (a) Write down four (04) stitch properties, which relate to aesthetics and performance of seams. (02 marks)
- (b) Briefly explain why chain stitches are widely used in automated and semi-automated sewing machines. (03 marks)
- (c) Compare the stitch type **301**(single needle lock stitch) with stitch type **401**(single needle multi thread chain stitch) in all aspects (10 marks)
- (Q5) With aid of diagrams briefly explain the stitch formation process of stitch type **401**. (15 marks)
- (Q6) (a) Briefly explain the tasks of "**Take up lever**", "**Needle**", "**Presser foot**", "**Back tack lever**" and "**Feed dog**" of a sewing machine. (10 marks)
- (b) Write down five (5) bed types of sewing machines. Give an example for each type. (05 marks)
- (Q7) (a) Briefly explain why different types of feeding systems are used in sewing machines. (07 marks)
- (b) Compare "**Drop feed**" and "**Compound feed**" systems in all aspects. (08 marks)
- (Q8) (a) Write a short description on benefits of using attachments during sewing process. (05 marks)
- (b) Write down five (05) automation devices and their tasks, which are common in modern sewing machines. (10 marks)
- (Q9) Seam pucker can be occurred due to many factors. List the five (05) types of **seam pucker** and briefly describe each type. (15 marks)