

The Open University of Sri Lanka
Department of Textile and Apparel Technology
Bachelor of Industrial Studies
Final Examination - 2012/2013
TTI5145 - Foundation Garments
Duration - 03 Hours



Date: 23rd July 2013

Time: 0930-1230hrs

This paper consists of three (03) pages and eight (08) questions

Answer six (06) questions only.

Marks allocated for each question is given at the end of the question.

- Q1. (a)** Explain the five (05) requirements that are expected from the different foundation garments, according to the definition. Give two (02) examples of foundation garments to fulfill each of the mentioned requirements. (30 marks)
- (b)** Giving examples, explain why do we wear cloths. Explain how do your mentioned examples fulfill the requirements of wearing cloths. (30 marks)
- (c)** Briefly explain the functions that you expect in designing the following foundation garments.
- (i) Corset (ii) Bikini (iii) Children's intimates (iv) Bra (40 marks)
- Q2. (a)** Briefly explain the following functions of foundation garments and give suitable examples for them to fulfill the particular function.
- (i) Body shaping (ii) Protection and comfort
 (iii) Hygiene and medical aspects (30 marks)
- (b)** Briefly explain how the following foundation garments are designed to meet the physiological requirements.
- (i) Vest for males to be used in tropical climates (ii) Sleep wear for winter season
 (iii) Swim wear (30 marks)
- (c)** Explain what types of serviceability and durability functions you expect from following foundation garments.
- (i) Vest (ii) Swim wear (iii) Ladies briefs (iv) Sleep wear (40 marks)

- Q3. (a)** Consider men's two foundation garments as briefs & vests and briefly explain,
- (i) Suitable fabrics and reasons for selecting them (ii) Necessary body measurements to construct the patterns and how you measure those on a human body (40 marks)
- (b)** What are the measurements required to construct the patterns for the following foundation garments? Briefly explain how do you take those measurements from a female body (you may use suitable diagrams to explain this).
- (i) Petticoat (ii) Brassiere (iii) Corset (30 marks)
- (c)** Brassieres are designed in different styles for the various purposes. Select any three (03) of them and explain,
- (i) Style features of each of them using proper sketches and the purpose
(ii) How each of these styles fulfill its purposes (30 marks)
- Q4. (a)** Briefly explain three (03) similarities and differences between the corset and girdle. (30 marks)
- (b)** Explain three (03) style variations of women's girdle and give body measurements that are required to construct patterns for them. What are the methods used to take measurements from the human body. (30 marks)
- (c)** Explain why swim wear should fulfill the following aspects.
- (i) Hygenic (ii) Aesthetic (iii) Protection (iv) Fastness properties (40 marks)
- Q5. (a)** Knitted fabrics are heavily used today for foundation garments. Briefly explain any two (02) weft and warp knitted structures used in manufacturing foundation garments with suitable examples. (20 marks)
- (b)** "The fabrics made with elastomeric yarns and micro fibres are extensively used in foundation garment industry today." Explain this statement.
You may consider their inherent characteristics and properties to answer this question. (40 marks)
- (c)** Briefly explain any four (04) special functions or developments available with specialized sewing machines used in foundation garment industry. (40 marks)

Q6. (a) Explain what is moulding and why is it important for manufacturing of certain foundation garments. (20 marks)

(b) In moulding process, temperature applied to the garment component varies with the moulding time. Explain this behavior using a suitable diagram. (40 marks)

(c) "Garment panel welding gives many advantages compared to conventional sewing, but there is a limitation/ conditions to use in welding technique in garment assembling". Explain this statement using suitable examples. (40 marks)

Q7. (a) Explain any three (03) problems may arise during mass production of foundation garments, if the fabric inspection is omitted and fabrics are having considerable defects. (30 marks)

(b) Briefly explain any two (02) defects which may possible to arise at the each of the following stages in foundation garment manufacturing process and state how to overcome each of them.

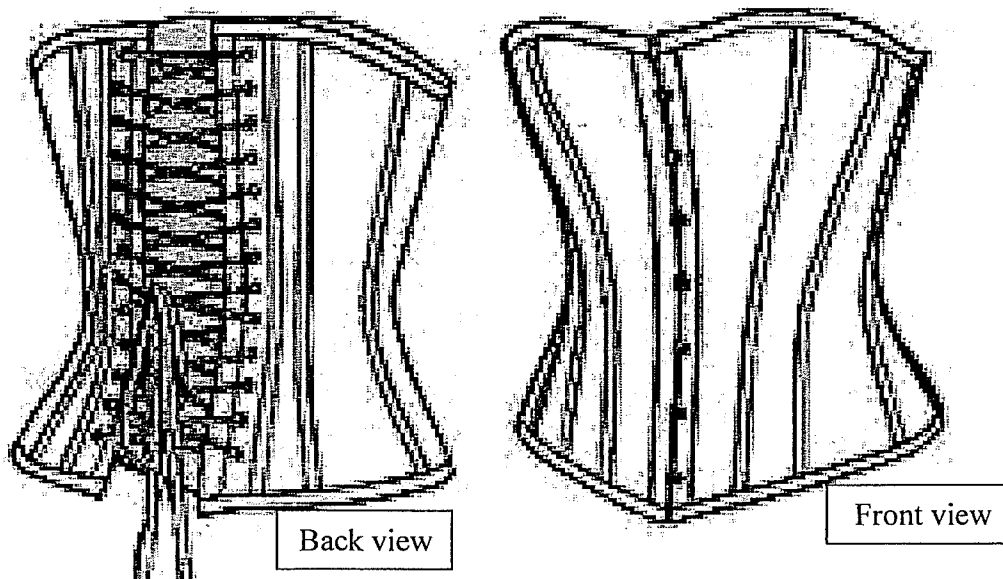
(i) During spreading fabric plies (ii) During cutting the fabric lay (30 marks)

(iii) During sewing

(c) Briefly explain the following defects which may possible to generate during fusing of garment Components.

(i) Strike through (ii) Strike back (iii) Delamination (iv) Bubbling (40 marks)

Q8. (a) Write down an operational break down and propose suitable sewing machines for manufacturing the corset given below. (40 marks)



- (b) Briefly explain why "Fit test" is important for foundation garments manufacturing and what would be checked in this test. (20 marks)
- (c) Explain five (05) most important quality check points for final inspection on a brassiere with indicating the method of checking them.
What are the problems that can be arosen, if you do not check each of those quality check points. (40 marks)