

The Open University of Sri Lanka

Department of Textile and Apparel Technology

Bachelor of Industrial Studies (Apparel Production and Management)

Final Examination-2007/2008

TTI5145-Foundation Garments

Duration- 3 Hours

Date:4th May 2008

Time:0930-1230hrs

Total number of questions:08

Answer **six (06)** questions only.

Each question carries one hundred (100) marks.

Q1. (a) Give the definition of foundation garments. According to the definition, **briefly** explain the main requirements that can be expected from following foundation garments.

- (i) men's vests
- (ii) men's briefs
- (iii) bra/brassiere
- (iv) corset

(60 marks)

(b) Explain why foundation garments should be fulfilled the following functions. You may use suitable examples to answer for this part of the question.

- (i) Body shaping and retaining
- (ii) Protection
- (iii) Comfort
- (iv) Hygiene and medical aspects

(40 marks)

Q2. (a) Explain the design features of two basic petticoat types by using sketches.

(20 marks)

(b) What are the body measurements required to draft a pattern for a petticoat.

(20 marks)

(c) Give style variations of any three types of petticoats and explain their specific features with the aid of suitable diagrams.

(30 marks)

(d) Give the purposes of wearing and style features of following brassieres.

- (i) strapless brassieres
- (ii) Under wire brassieres
- (iii) Sports brassieres

(30 marks)

- Q3.** (a) Explain what corsets and girdles are? (10 marks)
- (b) Give any four (04) differences between corset and girdle. (20 marks)
- (c) Explain three (03) style variations that can be introduced to corsets and give the body measurements required to construct patterns of a corset. (40 marks)
- (d) In manufacturing a thermal underwear, dressing in layers system is used. Explain what are those layers and the important features of dressing in layers method. (30 marks)
- Q4.** (a) Explain mostly used woven, weft knitted and warp knitted fabric structure types for the manufacturing of foundation garments and give the examples of using above mentioned fabric structure types in foundation garments. (30 marks)
- (b) Explain the purposes of using elastic fibers/yarns (eg: spandex) in foundation Garments. (20 marks)
- (c) Explain the important features of following elastomeric yarn types.
 (i) Single/double covered yarns
 (ii) Air covered yarns
 (iii) Corespun yarns (30 marks)
- (d) Why do micro fibers greatly used in foundation garments. (20 marks)
- Q5.** (a) What do you mean by the term “moulding technique” used in apparel manufacturing and explain important working parameters important for this technique. (20 marks)
- (b) Explain why is this technique important in manufacturing of foundation garments (you may use a foundation garment as an example). (20 marks)
- (c) Explain the fabric dimensions or characteristics, which is subjected to change during moulding process. (40 marks)
- (d) Explain basic moulding technique used in apparel manufacturing. (20 marks)
- Q6.** (a) What is “garment welding”? Explain the garment welding technique in brief. (25 marks)
- (b) Compare the garment welding technique with conventional sewing technique (you may consider the advantages, disadvantages and limitations of garment welding technique compared to the sewing technique). (30 marks)
- (c) Explain three (03) kinds of principles used in garment welding technique. (45 marks)

Q7. (a) Explain the meaning of “quality” and why is it important? (20 marks)

(b) Distinguish different inspection methods, which can be used to check the quality in apparels during manufacturing. (40 marks)

(c) Explain the following defects, which could occur during manufacturing of apparels. Suggest the method/s to minimize or eliminate those defects.

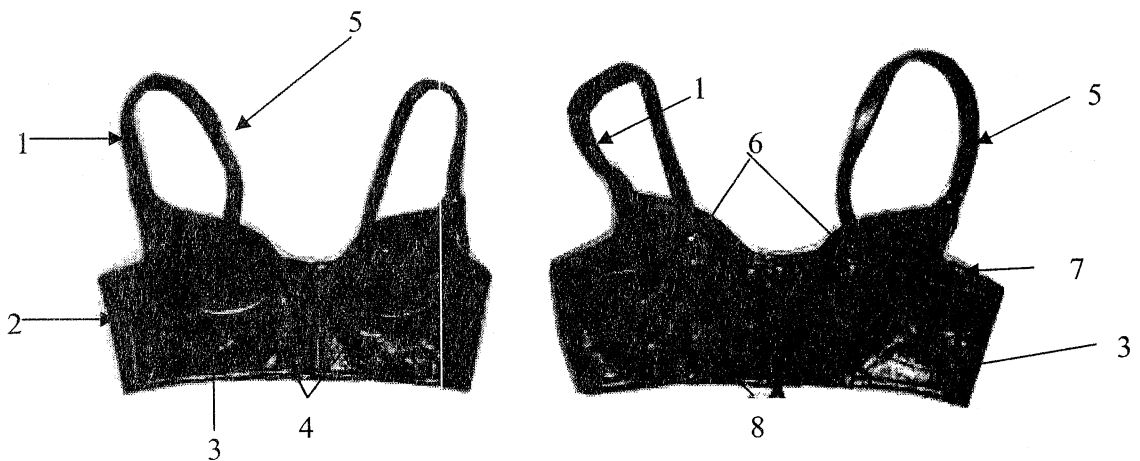
- (i) Incorrect ply tension
- (ii) Fabric panels with raged edges.
- (iii) Seaming defects
- (iv) Strike through

(40 marks)

Q8. (a) Explain the importance of fit of foundation garments. (20 marks)

(b) Following figures show front and back views of a women’s brassiere, whose specifications are given below.

It has finished using red and black satin fabrics and fasten by a code at the back side. Front side has finished with black satin and top of the back side has red colour satin and lower part of back side has black colour satin. Seamless bra cups are moulded and attached to the front side with under wire. Adjustable straps are attached to the main body of the bra. Brassiere is lightly lined.



1- Eyelets

2- Piping

3- Black stain

4- Moulded bra cups (with wire insertion)

5- Adjustable strap

6- Metal rings with adjusters

7- Red satin

8- Fastening code

What are the important quality checks/tests that should be carried out for incoming materials and final inspection of this foundation garment? (80 marks)