THE OPEN UNIVERSITY OF SRI LANKA
DEPARTMENT OF TEXTILE AND APPAREL TECHNOLOGY
DIPLOMA IN INDUSTRIAL STUDIES / APPAREL PRODUCTION AND MANAGEMENT
FINAL EXAMINATION – 2005
TTI4238/2238 – GAMENT MANUFACTURE
DURATION – THREE HOURS

DATE: 23rd March 2006   **TIME: 0930 To 1230hours**
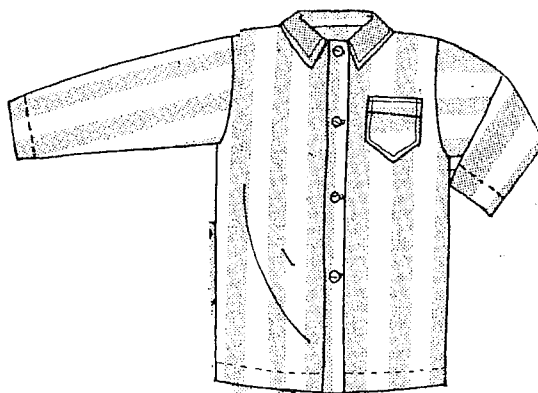
DATE: 23rd March 2006   TIME: 0930 To 1230hours

Total number of questions = 09   Number of questions to be answered = 06
Answer **question 1**, which is **compulsory** and additional **five (5)** questions.
Question 1 carries twenty five (25) marks.

(Q1) (a) Give three factors that depends on the height of the spread.   **(02 Marks)**

(b) Draw four different types of fabric packages and name them.   **(02 Marks)**

(c) Give three advantages of the machine spreading.   **(03 Marks)**

(d) Write the reasons for the following cutting problems.   **(02 Marks)**
   (i) Ply to ply fusion or single edge fusion.
   (ii) Frayed edges.

(e) Give four advantages of the Rotary Blade cutting knife.   **(02 Marks)**

(f) "Manufacturing garment can be classified by considering the frequency of the style variation". What are they?   **(02 Marks)**

(g) What are the three elements of moulding process?   **(02 Marks)**

(h) Draw the symbol to indicate the following processes in the label.   **(03 Marks)**

   (i) Thumbler drying.
   (ii) Normal goods dry cleanable in all solvents
   (iii) Ironing for polyester mixtures and wool.

(i) Write three methods to remove the stains from grey fabrics.   **(03 Marks)**

(j) Give four objectives of vacuum packing.   **(04 Marks)**

(Q2) (a) "The quality of the spread affects the quality of the finished garments". Explain four requirements that affect for quality of spread.   **(40% Marks)**

(b) Compare the similarities and dissimilarities of the band knife and straight knife that are used in the garment industry.   **(30% Marks)**

(c) Briefly explain the main parts in a computer controlled-cutting machine, and their contribution to the cutting process.   **(30% Marks)**

1

(Q3) (a) Briefly explain the product types that are classified according to the style variation of the garment.
(20% Marks)

(b) Sketch a suitable graph to describe the relationships between the following two operational factors and the product types.
(40% Marks)

    (i) Sizes of the organization
    (ii) Skill level of the operator.

(c) "Division of labour is more suitable in the garment industry' than the individual work of labour". Discuss this statement.
(40% Marks)

(Q4) (a) Explain the similarities and dissimilarities of the make through system of the garment manufacturing and conventional bundle systems.
(30% Marks)

(b) Give the reasons for the following advantages of the Unit Production System of garment manufacturing.
(30% Marks)

    (i) No bundle handling time.
    (ii) Changes can be done quickly.
    (iii) Suitable for fashion garments.

(c) Briefly explain the features of the Quick Response System of garment manufacture.
(40% Marks)

(Q5) The shirt consists with one piece collar (Top & bottom parts), separate placket and double folded sleeve hem. It has a plain black panel and single folded bottom hem and the pocket placed at the left front panel.
Required diagram is given below .
Give the operational breakdown and required machine / equipment to construct the given shirt.
(100% Marks)

(Q6) (a) Briefly explain the process of fusing.
(25% Marks)

(b) Explain six types of fusing problems.
(45% Marks)

(c) Direct heating, indirect heating, direct or indirect heating are three methods to provide the heat in continuous fusing system. Briefly explain above three methods.
(30% Marks)

(Q7) (a) Define the terms "welding" and "moulding" **(20% Marks)**

(b) Explain the process of the welding and give four applications **(50% Marks)**

(c) Give three advantages and disadvantages of the alternative methods of garments assembly other than sewing. **(30% Marks)**

(Q8) (a) Explain the action of detergent on a fabric with suitable diagrams.

(40% Marks)

(b) Discuss the four advantages of the enzyme washing over the use of pumic stones. **(20% Marks)**

(c) Briefly explain how to remove the following stains from a fabric. **(40% Marks)**

   (i) Perspiration stains.
   (ii) Mildew stains on cotton/ wool fabrics.
   (iii) Tar, Wax and grease stains.
   (iii) Blood stains from white cotton and viscose rayon fabrics.

(Q9) (a) Packing mainly fulfils two functions. Briefly explain each of them. **(30% Marks)**

(b) Explain the advantages of the vacuum packing. **(40% Marks)**

(c) Briefly explain three methods of storing of finished garments indicating advantages. **(30% Marks)**