DEPARTMENT OF TEXTILE TECHNOLOGY
MAJOR - 2008

TTL751 : APPAREL ENGINEERING AND QUALITY CONTROL

Max Marks : 40

1. **Define seam slippage. How seam slippage occurs. How seam slippage is evaluated? What are various factors which decide amount of slippage in a sewn material? Explain each factor with justification. How can you prevent seam slippage? [5]**

2. **Name and explain the essential fabric properties and other associated information required for creation of design, construction of pattern, pattern grading, laying, spreading, cutting, sewing and pressing operations during garment manufacturing. [5]**

3. **How seam pucker can be avoided when you are sewing with a) nylon and cotton fabric, b) highly extensible sewing thread, c) plies of differential shrinkage, d) jammed fabric with no option of changing weave and e) jammed fabric of low float with option of changing weave. [5]**

4. **Define formability. Derive an expression for it. What will be its unit? What are experimental methods to get it? What are its utilities in clothing manufacture. [5]**

5. **What is needle penetration force? Why it is measured? How to obtain needle penetration force on a running sewing machine. What are various factors which influence needle penetration force? Explain a model to determine needle penetration force. [10]**

6. **Identify various fabric low stress KES parameters which can be effectively used in tailoring process control. Describe the role of each parameter with the help of a control chart. [5]**

7. **Answer in one line.**

   i) **Which needle part is considered to express needle number ?**

   ii) **What happens to drape if seam allowance increases ?**

   iii) **Which Feeding system is used for sewing slippery fabric ?**

   iv) **Which sewing thread is preferred for sewing heavy weight denim cloth.**

   v) **Which stitch is used to sew knitted cloth ?**

[5]