

**FEDERAL UNIVERSITY OF TECHNOLOGY, OWERRI.  
SCHOOL OF ENGINEERING AND ENGINEERING TECHNOLOGY  
DEPARTMENT OF POLYMER AND TEXTILE ENGINEERING**

**2009/2010 HARMATTAN SEMESTER EXAMINATIONS.  
PTE. 509: COMPLEX TEXTILE DESIGN.**

**TIME : 3HRS.**

**INSTRUCTIONS: ANSWER FIVE QUESTION ONLY**

**QUESTION 1.** (a) List any three features of a repp fabric.

(b) Using any motif and cross section of your choice, produce the point paper diagram of a repp fabric which is figured with the aid of ONE weft only.

(b) Give the card cutting instruction for a textile firm which uses the divided harness or the dobbie loom to produce the weave.

**QUESTION 2.** (a) Using some clearly labeled diagrams, show the major difference between a true repp and an adulterated repp.

(b) Show the cross sectional diagram of a true repp fabric figured with the aid of two warps and two wefts.

(c) Produce the point paper diagram for the above fabric.

(d) Produce the card cutting instruction to aid the weaver produce the design on a simple jacquard loom and

(e) On a divided harness arrangement.

**QUESTION 3.** (a) In order to produce a "backed fabric" using the interchange method, some fundamental rules must be observed. List these rules.

(b) Using the interchange method, produce the cross section of any two-colour fabric.

(c) Also produce the point paper diagram for the design.

(d) Give an adequate instruction to the weaver so that he/she can produce the design on a simple jacquard loom.

**QUESTION 4:** As a manager of a weaving mill, you have been requested to produce a plain weave stripe fabric to be used by school children. The stripes show red, blue and bluish red.

(a) What method would you use in producing the above design?

(b) Show the motif and the cross sectional diagram for the above design.

(c) Produce the point paper design for the above design and

(d) Indicate the card cutting instruction to enable you weave the design on a simple divided harness loom.

**QUESTION 5:** (2) Produce the motif and point paper diagram of a repp fabric figured on TWO wefts.

(b) Give the card cutting instruction to enable the designer weave the fabric on a simple jacquard loom.

**QUESTION 6:** "TEXTILE DESIGN AND TODAY'S FASHION" Critically comment on the above topic.