2803/202 TEXTILE SCIENCE II AND CLOTHING CONSTRUCTION II THEORY June/July 2022 Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

DIPLOMA IN FASHION DESIGN AND CLOTHING TECHNOLOGY MODULE II

TEXTILE SCIENCE II AND CLOTHING CONSTRUCTION II THEORY

3 hours

INSTRUCTIONS TO CANDIDATES

This paper consists of TWO sections; A and B.

Answer any THREE questions from section A and any TWO questions from section B in the answer booklet provided.

Maximum marks for each part of a question are as indicated.

Candidates should answer the questions in English.

This paper consists of 4 printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

SECTION A: TEXTILE SCIENCE II (60 marks)

Answer any THREE questions from this section.

| 1. | (a) | (i) | Explain the term 'synthetics' as used in textile fibre production. | (2 marks) | |
|----|-----|--|---|-------------------------|--|
| | | (ii) | Highlight six advantages of synthetic fibres. | (6 marks) | |
| | (b) | (i) | Explain three factors that may make polyester fabrics uncomfortable | e to wear. (6 marks) | |
| | | (ii) | Explain three factors that may make acetate fabrics comfortable to | wear. (6 marks) | |
| 2. | (a) | Illustrate the care label symbols for each of the following: | | | |
| | | (i) | use warm iron; | | |
| | | (ii) | dry on line; | | |
| | | (iii) | wash in boiling water; | | |
| | | (iv) | tumble dry; | | |
| | | (v) | do not dry-clean; | | |
| | | (vi) | do not wash. | (61-) | |
| | | | | (6 marks) | |
| | (b) | Descr | ibe each of the following yarn texturing methods: | | |
| | | (i) | knit-de-knit; | (3 marks) | |
| | | (ii) | false twisting. | (3 marks) | |
| | (c) | Expla | in four care measures to observe when hand-washing a printed rayon | fabric. (8 marks) | |
| 3. | (a) | Outlin | ne three disadvantages of lace fabrics. | (3 marks) | |
| | (b) | Highl | ight seven advantages of polyester fabrics. | (7 marks) | |
| | (c) | Expla | in five factors that affect the dye-ability of a fabric. | (10 marks) | |
| 4. | (a) | Descr | ibe the 'needle felting' process of fabric formation. | (4 marks) | |
| | | | | | |

| | (b) | With the aid of illustrations, explain the longitudinal and cross-sectional microscopic appearance of viscose fibres. | | | | |
|----|-----|---|---|------------------|--|--|
| | (c) | (i) | Explain the term 'colour fast', as used in fabric colouration. | (2 marks) | | |
| | | (ii) | Explain the procedure for testing 'bleeding fastness' in fabrics. | (4 marks) | | |
| | (d) | | rate the textile fibre classification chart for the following fibres. n, polyester, acrylics) | (5 marks) | | |
| 5. | (a) | Expla | Explain each of the following terms as used in man-made fibre production: | | | |
| | | (i) | polymer; | (2 marks) | | |
| | | (ii) | stretching; | (2 marks) | | |
| | | (iii) | crimping. | (2 marks) | | |
| | (b) | Descri | ibe the 'rotary' screen printing process. | (5 marks) | | |
| | (c) | (i) | Explain the term 'steeping' as used in the viscose fibre production pr | ocess. (2 marks) | | |
| | | (ii) | Highlight seven limitations of viscose fabrics. | (7 marks) | | |
| | | | ensyl. | | | |
| | | SI | ECTION B: CLOTHING CONSTRUCTION II (40 marks) | | | |
| | | | Answer any TWO questions from this section. | | | |
| 6. | (a) | Explai | n four factors that influence the choice of a seam. | (8 marks) | | |
| | (b) | Identif | fy six stitching faults. | (6 marks) | | |
| | (c) | Explai | n three care measures for a sewing machine needle. | (6 marks) | | |
| 7. | (a) | Outlin | e the steps for assembling a princess dress with the following details: | | | |
| | | (i) (ii) (iii) | back seam with a zip opening; > bound armholes; faced neckline; | | | |
| | | (iv) | plain open seams. 4 | (9 marks) | | |

- (b) Explain **three** safety precautions to observe when handling cutting equipment. (6 marks)
- (c) Identify five areas where interfacings are applicable on a garment. (5 marks)
- 8. (a) With the aid of illustrations, explain the procedure for making a bound opening. (10 marks)
 - (b) Explain five factors to consider when choosing a special sewing machine. (10 marks)

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