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1ST SEM. 2016/ 17

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**UNIVERSITY OF SWAZILAND
FINAL EXAMINATION PAPER**

**PROGRAMME : BACHELOR OF SCIENCE IN TEXTILE
APPAREL DESIGN AND MANAGEMENT YEAR
II**

COURSE CODE : TAD201

TITLE OF PAPER : TEXTILE CARE

TIME ALLOWED : TWO (2) HOURS

**INSTRUCTIONS : ANSWER QUESTION ONE (1)
AND ANY OTHER TWO (2) QUESTIONS**

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THE CHIEF INVIGILATOR**

QUESTION 1 (COMPULSORY)

- a) Define soil release (2 Marks)
- b) With the aid of properly labelled diagrams, explain the cleansing action of soap (10 Marks)
- c) State **two (2)** minerals commonly found in hard water (2 Marks)
- d) List **five (5)** problems caused by hard water in laundry (5 Marks)
- e) Boiling can be used to remove temporary hardness in water, with the help of chemical equations show how temporary hardness in water can be resolved through boiling (8 Marks)
- f) Differentiate between precipitating and non-precipitating packaged water softeners (10 Marks)
- g) Name **three (3)** properties that can be imparted on a garment by fabric softeners (3 Marks)

[TOTAL MARKS = 40]

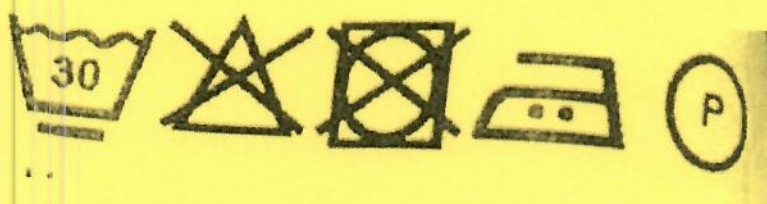
QUESTION 2

- a) Define the term soap and using a graphical representation show how a soap molecule is structured (5 Marks)
- b) Define the term surfactant (2 Marks)
- c) Give **three (3)** differences between soaps and detergents (6 Marks)
- d) Name any **two (2)** stain removal techniques, and explain how they are carried out (6 Marks)
- e) Explain how the following stains can be removed from garments (9 Marks)
 - i. Blood
 - ii. Tea
 - iii. Chewing gum
- f) Why is it always advisable to wash protein stains in cold rather than hot water? (2 Marks)

[TOTAL MARKS = 30]

QUESTION 3

- a) Explain how you can get rid of persistent odour problems in garments (4 Marks)
- b) Give **five (5)** different classes of stains, giving an example for each class (10 Marks)
- c) Name **two (2)** chemicals that are normally used to impart soil repellence in fabrics, and state one major difference between the two chemicals (4 Marks)
- d) A garment has the following care label shown below, give a detailed explanation of the care regime for the garment (10 Marks)



- e) Name **two (2)** effects that result from incorrect storage of garments (2 Marks)

[TOTAL MARKS = 30]

QUESTION 4

- a) Classify textile finishing according to performance giving two examples for each class (6 Marks)
- b) Explain what is meant by the following terms: (8 Marks)
- i. permanent finish
 - ii. durable finish
 - iii. semi-permanent finish
 - iv. temporary finish
- c) Give **four (4)** reasons that can lead to loss of tensile strength in garments during laundering (4 Marks)
- d) What is the role of anti-deposition agents found in detergents? (2 Marks)
- e) Give an example of an anti-deposition agent that is effective with cotton fabrics, use a graphic illustration to show how the agent works on cotton fabric surfaces (6 Marks)
- f) List **four (4)** factors that affect soil release in fabrics (4 Marks)

[TOTAL MARKS = 30]