



UNIVERSITY OF ESWATINI
FINAL EXAMINATION PAPER

PROGRAMME : BACHELOR OF SCIENCE IN TEXTILES, APPAREL
DESIGN AND MANAGEMENT YEAR III

COURSE CODE : TAD405

TITLE OF PAPER : TEXTILE DYEING AND PRINTNG

TIME ALLOWED : TWO (2) HOURS

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

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CHIEF INVIGILATOR**

QUESTION 1 (COMPULSORY)

- a) Describe **three (3)** types of symmetry that can be used in Textile Design. (9 Marks)
- b) Name and describe the printing method used on the cushion covers below. (6 Marks)



- c) State **three (3)** advantages of the printing method in (b) above. (3 Marks)
- d) Describe **five (5)** faults that can be found on printed fabrics. (10 Marks)
- e) You have been tasked with teaching tie-dye technique to a group of 10 year olds. They have requested that you teach them how they can come up with a colourful design having horizontal stripes. Outline the processes that you will teach them in order to come up with the desired design. (12 Marks)

[TOTAL MARKS = 40]

QUESTION 2

- a) Give **five (5)** advantages and **five (5)** disadvantages of dyeing with natural dyes. (10 Marks)
- b) i) List **two (2)** objectives of scouring. (2 Marks)
- ii) Outline the scouring process you would use in the pre-treatment of cotton during your practical classes. Include all the chemicals to be added in your scouring liquor. (12 Marks)
- c) Dyeing can be carried out using any one of three processes:
- i) Name **three (3)** dyeing processes that can be used in the dyeing of materials. (3 Marks)
- ii) Give **three (3)** factors that influence the choice of the dyeing process. (3 Marks)

[TOTAL MARKS = 30]

QUESTION 3

- a) Differentiate between dyeing and printing. (10 Marks)
- b) Explain **two** (2) methods in which mordants can be applied when dyeing with natural dyes. (6 Marks)
- c) Give **four** (4) principal properties that all dyes must possess. (4 Marks)
- d) Describe all the different stages carried out when dyeing with vat dyes. (10 Marks)

[TOTAL MARKS =30]

QUESTION 4

- a) Give a detailed description of bleaching cotton fabrics using hydrogen peroxide as a bleaching agent. (15 Marks)
- b) Describe the following printing techniques: (10 Marks)
 - i) Direct printing
 - ii) Resist printing
- c) Explain the function of thickening agents in printing. Name **two** (2) commonly used thickening agents in printing. (3+2=5 Marks)

[TOTAL MARKS = 30]