



**UNIVERSITY OF SWAZILAND  
FINAL EXAMINATION PAPER**

**PROGRAMME : BACHELOR OF SCIENCE IN TEXTILE APPAREL  
DESIGN and MANAGEMENT YEAR III**

**COURSE CODE : TADM 307**

**TITLE OF PAPER : COLOURATION TECHNOLOGY**

**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) Name **four (4)** factors that can influence how a colour is perceived. (4 Marks)  
b) Name and describe the colour scheme used in the following painting by Vincent van Gogh titled La Berceuse (1889; Oil on canvas). (10 Marks)

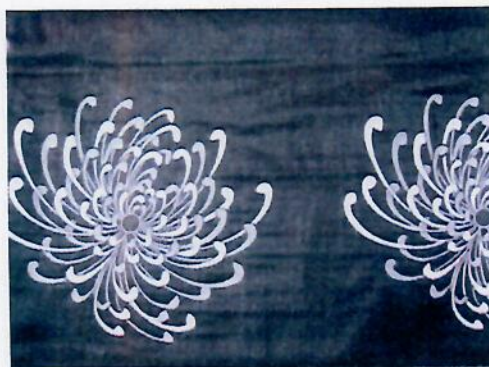


- c) With the aid of a diagram briefly describe how a colorimeter is used to measure colour. (8 Marks)  
d) Fabric desizing can be achieved in a number of ways. Use a table to show the different methods of desizing. (8 Marks)  
e) Briefly explain any **five (5)** effects of mercerisation on cotton fabrics. (10 Marks)

[40 MARKS]

**QUESTION 2**

- a) Briefly describe the steps involved in a typical fabric printing process. (8 Marks)  
b) Name and describe the printing process used to achieve the following design. (8 Marks)



- c) Give **four (4)** advantages of the above named printing process. (4 Marks)  
d) Briefly describe **three (3)** factors that influence dye selection. (6 Marks)  
e) Give **four (4)** advantages of colour measurement. (4 Marks)

[30 MARKS]



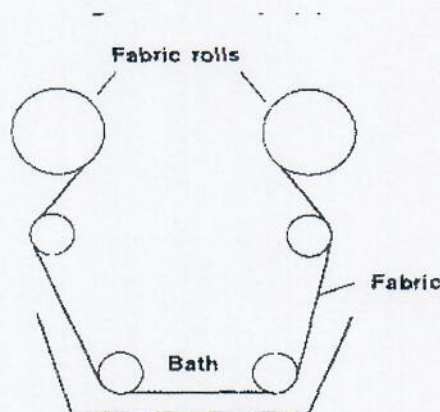
**QUESTION 3**

- a) Natural dyes can be extracted from plant sources. Describe any method that can be used to extract natural dyes from plant sources. (10 Marks)
- b) Give a detailed description of the mordanting process. (8 Marks)
- c) Briefly describe the processes that take place during the scouring process. (10 Marks)
- d) Define colour space (2 Marks)

[30 MARKS]

**QUESTION 4**

- a) Name and explain the dyeing method illustrated below. (10 Marks)



- b) Give **four (4)** advantages and disadvantages of block printing. (8 Marks)
- c) What are the **four (4)** principal properties that all dyes must possess? Discuss (8 Marks)
- d) Name any **four (4)** characteristics of a good warp sizing agent. (4 Marks)

[30 MARKS]