

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF TEXTILE TECHNOLOGY

END OF SEMESTER EXAMINATIONS DECEMBER 2003

NON WOVENS TXT 4124

TIME: 3 HOURS

INSTRUCTIONS

Answer 5 questions

Answer **5** questions in this section.

1. Describe briefly the following
 - (a) Felt fabrics
 - (b) Needle punched fabrics
 - (c) Spunlaced fabrics
 - (d) Wet-laid fabrics
 - (e) Dry laid fabrics
 - (f) Melt blown fabrics
 - (g) Isotropic web structure
 - (h) Carding
 - (i) Spunbond
 - (j) Bicomponent fibre

(20 marks)

2. Write notes on
 - (a) drying methods for wet laid systems
 - (b) dry laying

(20 marks)

3. Describe the spunlace process for cotton pads and other products. Outline the main components of an Aquajet System.

(20 marks)

4. Discuss the principles involved in
 - i) thermal bonding
 - ii) needle punching

Compare and contrast these. List some applications of the products.
(20 marks)

5. Write notes on nonwoven textiles for healthcare and hygiene.
(20 marks)
6. Discuss the growth of the non-woven industry, giving a survey of their market in Zimbabwe.
(20 marks)
7. Describe briefly the production and chemical structure of polyurethane foam. Discuss its end-uses.
(20 marks)

END OF QUESTION PAPER