

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF TEXTILE TECHNOLOGY

FINAL EXAMINATIONS DECEMBER 2004

ENGINEERING DRAWING – TIE 1003

TIME: 3HOURS

INSTRUCTIONS

Section A – Question 1 is compulsory

Section B – Answer THREE questions out of four.

All dimensions are given in millimetres

Draw carefully. Use appropriate line thickness. Show all construction lines used.

Draw all your drawings to scale 1:1

Note: Draw standard margins only and print your registration number and examinations paper number on the upper right hand corner of the drawing sheet. Do not produce the Title Block.

SECTION A

1. Draw full size in third angle orthographic projection the following views of the block shown in Figure Q1.
 - (a) Sectional front view as seen along section line TT.
 - (b) Side elevation in direction of arrow *s*
 - (c) A plan projected from view (a) (40 marks)

SECTION B

2. draw an isometric projection of the support block shown in figure Q2. Position the components so that A becomes the lowest corner. (20 marks)
3. Accurately draw and dimension the component shown in Figure Q3 applying the principle of tangency. Show all construction lines used to find centres and points of tangency. (20 marks)
4. A front elevation and plan of a truncated Hexagonal prism are shown in figure Q4. Draw the two views and project the development of the prism from the front elevation to include the top as seen from arrow X and the base. (20 marks)
5. Construct the cam shown in figure Q5. Use the four centre methods for the ellipse part. (20 marks)

Do not produce the title block
END OF QUESTION PAPER



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