Please write clearly, in block capitals.


Candidate number


Surname
Forename(s)
Candidate signature $\qquad$

## AS Level <br> DESIGN AND TECHNOLOGY (FASHION \& TEXTILES)

## Date of Exam

Morning
Time allowed: 1h30m

## Materials

For this paper you must have:

- normal writing and drawing instruments
- a scientific calculator


## Instructions

- Use black ink or black ball-point pen. Use pencil only for drawing.
- Fill in the boxes at the top of this page.
- Answer all questions.
- You must answer the questions in the spaces provided. Do not write on blank pages.
- Do all rough work in this book. Cross through any work that you do not want to be marked.


## Information

- The marks for questions are shown in brackets
- The maximum marks for this paper is 80
- There are 45 marks in Section A and 35 marks in Section B.


## SECTION A: Technical Principles

This section contains multiple choice questions. For each multiple choice question you should shade in one lozenge.
1 Which one of the following is a natural fibre?

A Acrylic


B Nylon


C Polyester


D Ramie

[1 mark]

2 The chart below lists commercial names of fibres and fabrics. Complete the chart to give the classification of each fibre.

An example has been completed for you.

| Commercial name | Classification of fibre or fabric |
| :--- | :--- |
| Lycra® | elastane |
| Tactel® |  |
| Modal® |  |
| Tencel $®$ |  |

The data in Figure 1 below shows the sales of four different types of socks in a one month period.


Figure 1

What percentage of socks sold do not contain synthetic fibres? Show your working out.
[2 marks]
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$4 \quad$ Look at the fabric construction in Figure 2 below.


Figure 2

Which fabric is shown in Figure 2?
A Calico $\square$

B Denim

C Satin $\square$

D Velvet $\square$

5 Evaluate the importance of controlling hazardous substances when using dyes in textile finishing.
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TURN PAGE FOR NEXT QUESTION

6 Explain how computers can be used to develop and present ideas for fashion and textile products.
[6 marks]
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7 Look at the pleated dress in Figure 3 below.


Figure 3

The dress is made from $100 \%$ polyester.
Explain why this is a suitable fibre choice for this dress.
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| $\mathbf{8}$ | . | $\mathbf{1}$ |
| :--- | :--- | :--- | The use of a fabric with a one way design will make a garment more expensive to produce.

Give three other ways in which a one way pattern or nap can impact on the use of fabric when making garments.
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2.
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3.

| $\mathbf{8}$ | . | $\mathbf{2}$ |
| :--- | :--- | :--- |
| A manufacturer is making a batch of 5000 dresses. |  |  |

The dress needs 4 metres of a plain fabric but a pattern fabric is to be used.
The fabric needed for each dress must start with a full print.
Fabric 1 has a pattern repeat of 75 cm and costs $£ 12$ per metre.
Fabric 2 has a pattern repeat of 60 cm and is wide enough to allow two dresses to be cut out side by side.
It costs $£ 31.95$ per metre.
What is the difference in the total price for 5000 dresses for Fabric 1 and Fabric 2? Show your working out.
[6 marks]
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$9 \quad$ A designer has been given a brief to design an outdoor jacket. Discuss the social, moral and environmental issues they must consider in the design of this product.
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Figure 4


Figure 5

Figure 5 shows a square piece of fabric from which the frill around the bottom hem of the t -shirt is cut.
The frill around the bottom hem is made from one piece cut on the bias.
The depth of the frill is 5 cm . The dimensions of the fabric are $140 \mathrm{~cm} \times 140 \mathrm{~cm}$
The distance from the corner of the fabric to the corner of the hem is labelled as h .
The length of the frill is the distance between X and Y .
Calculate the length between $X$ and $Y$.
Give your answer to the nearest whole centimetre.
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## SECTION B: Design and Making Principles

11 Explain why market research is important for designers.
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12 A long skirt is made from three pieces of fabric. The skirt front and the skirt back are identical. The skirt pieces are laid out in the pattern shown in Figure $\mathbf{6}$ below.


Figure 6
The shaded area of the pattern shows the amount of wastage there would be if the three pieces were cut out in this way.

What is the minimum width of fabric that would be required to cut out the three pieces in the above pattern?
Round up your answer to the nearest whole cm.
[4 marks]
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13.1 Alexander McQueen was inspired by nature.

Evaluate how his work reflects this theme.
Give examples from a variety of his fashion collections in your answer.
[9 marks]
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 Evaluate the reasons for using this method.


Figure 7
[9 marks]
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| 13 | . | $\mathbf{3}$ The dress in Figure $\mathbf{7}$ on page $\mathbf{2 0}$ is a bespoke dress. $. ~ . ~$ |
| :--- | :--- | :--- |

Give three reasons why the dress is produced in this way.
1.
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14 What are the ethical responsibilities associated with the design of sustainable fashion products?
[6 marks]
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END OF QUESTIONS

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