

| | | | | | | | | | | |
|---------------------|--|--|--|--|--|------------------|--|--|--|--|
| Centre Number | | | | | | Candidate Number | | | | |
| Surname | | | | | | | | | | |
| Other Names | | | | | | | | | | |
| Candidate Signature | | | | | | | | | | |



General Certificate of Education
Advanced Subsidiary Examination
June 2010

Design and Technology: Product Design (Textiles)

TEXT1

Unit 1 Materials, Components and Application

Friday 28 May 2010 9.00 am to 11.00 am

For this paper you must have:

- normal writing and drawing instruments
- a Colour Insert Sheet (enclosed).

Time allowed

- 2 hours

Instructions

- Use black ink or black ball-point pen. Use pencil and coloured pencils for drawing.
- Fill in the boxes at the top of this page.
- Answer **all** questions in Section A.
- Answer **one** question from Section B, **either** Question 9 **or** Question 10.
- Answer the Question in Section C.
- You must answer the questions in the spaces provided. Do not write outside the box around each page.
- Do all rough work in this book. Cross through any work you do not want to be marked.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).

Information

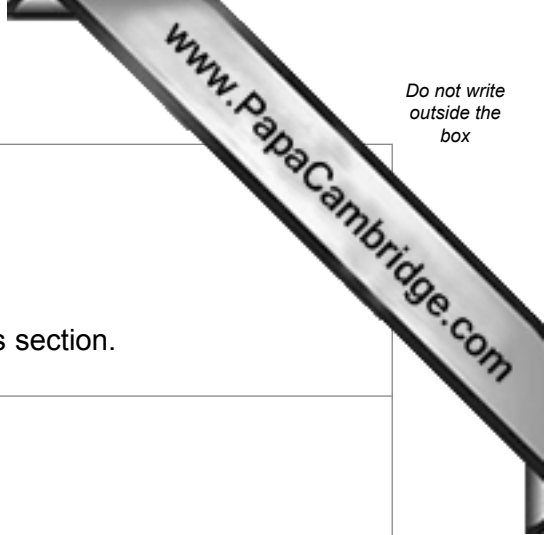
- The marks for questions are shown in brackets.
- The maximum mark for this paper is 80.
- There are 20 marks for Section A, 20 marks for Section B and 40 marks for Section C.

Advice

- Illustrate your answers with sketches and/or diagrams wherever you feel it is appropriate.
- You are advised to spend approximately 30 minutes on Section A, 30 minutes on Section B and one hour on Section C.

| | |
|---------------------|------|
| Examiner's Initials | |
| Question | Mark |
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| TOTAL | |





Section A

Answer **all** the questions in this section.

You are advised to spend about 30 minutes on this section.

1 Explain the difference between staple and filament fibres.

.....
.....
.....
.....

(2 marks)

| |
|---|
| |
| 2 |

2 Describe what is meant by a *dart* as used on textile products.
You may use a diagram.

.....
.....
.....
.....
.....

(2 marks)

| |
|---|
| |
| 2 |



3 Describe a *quilted fabric*.
You may use a diagram.

.....
.....
.....
.....
.....

(3 marks)

| |
|---|
| |
| 3 |

4 Explain the differences between an *underlining* and an *interfacing*.

.....
.....
.....
.....
.....
.....
.....
.....
.....

(4 marks)

| |
|---|
| |
| 4 |

Turn over ▶



5 Give the meaning of each of the care label symbols shown below.

5 (a)



.....
(1 mark)

5 (b)



.....
(1 mark)

5 (c)



.....
(1 mark)

| |
|---|
| |
| 3 |

6 What effect does a *Proban* finish have on a fabric?

.....
.....
(1 mark)

| |
|---|
| |
| 1 |

7 (a) Explain what is meant by the term *prototype*.

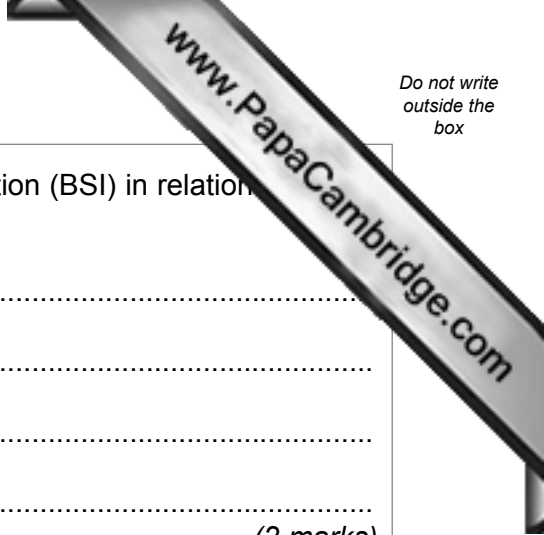
.....
.....
(1 mark)

7 (b) Give **two** different reasons why prototypes are used in industrial manufacture.

1.....
.....
2.....
.....
(2 marks)

| |
|---|
| |
| 3 |





8 Give **two** different functions of the British Standards Institution (BSI) in relation to products.

1

.....

2

.....

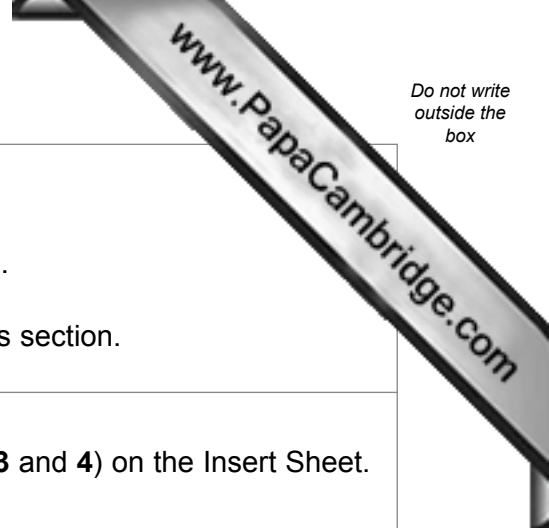
(2 marks)

| |
|---|
| |
| 2 |

Turn over for the next question

Turn over ▶





Section B

Answer **either** Question 9 **or** Question 10.

You are advised to spend about 30 minutes on this section.

9 Study the photographs of the two cushions (**Figures 1, 2, 3 and 4**) on the Insert Sheet.

9 (a) Cushion A is made from silk fabric.

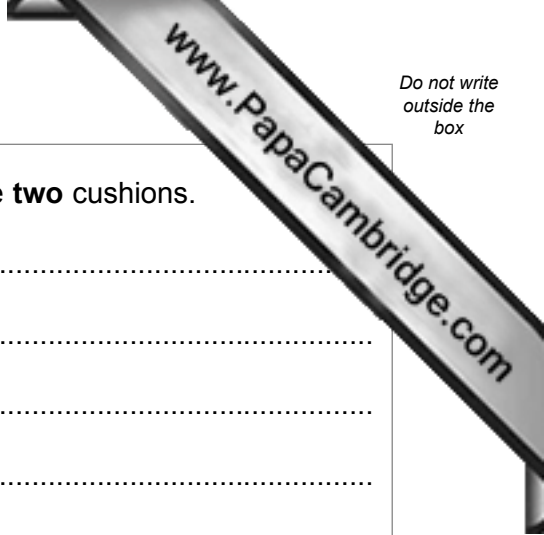
Critically evaluate the use of silk fabric for the cushion.

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

(5 marks)

Question 9 continues on the next page





9 (b) Evaluate the efficiency of the different openings used in the **two** cushions.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

(4 marks)

9 (c) Describe the ways that different textures have been achieved on Cushion B.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

(3 marks)

Question 9 continues on the next page

Turn over ▶





9 (d) Explain how to work the edge finish used on Cushion A.
You may use diagrams.

.....
.....
.....
.....
.....
.....
.....
.....

(4 marks)

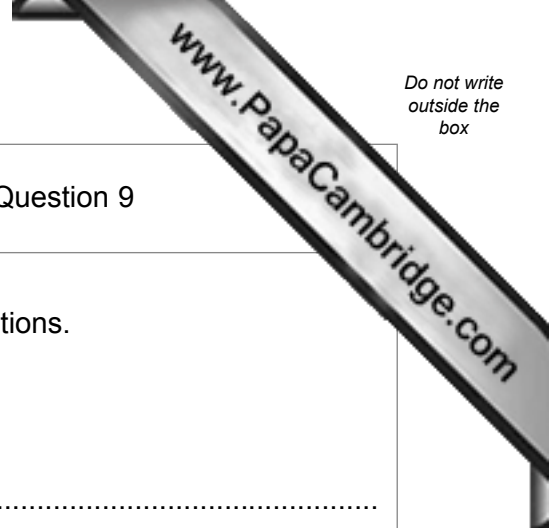
9 (e) Explain the importance of accurate manufacture in **two** different areas of Cushion B.

1.....
.....
.....
.....
.....
.....
.....
.....
2.....
.....
.....
.....
.....

(2 × 2 marks)

20





Do **not** answer Question 10 if you have answered Question 9

10 Non-woven fabrics are important for many different applications.

10 (a) Describe how a non-woven fabric is produced.
You may use a diagram.

.....
.....
.....
.....
.....
.....
.....

(3 marks)

10 (b) Justify the use of non-woven fabrics in a range of medical textiles.

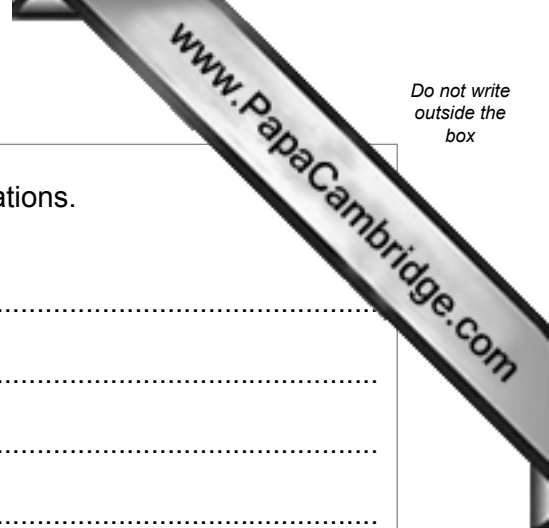
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

(5 marks)

Question 10 continues on the next page

Turn over ▶





10 (c) Smart textile materials are used for a wide range of applications.
What are *smart textiles*?

.....
.....
.....
.....

(2 marks)

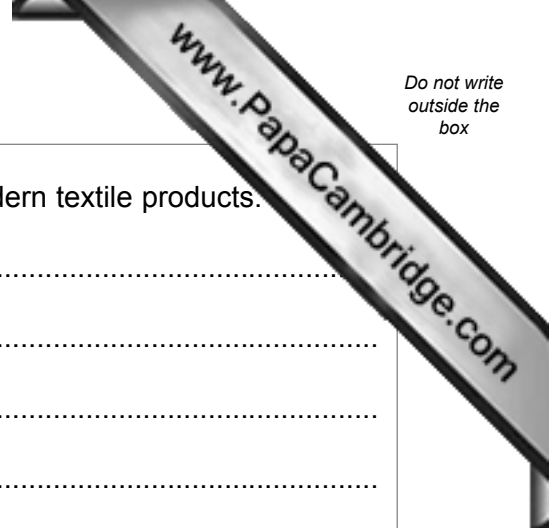
10 (d) Give details of **two** ways in which smart textile materials are used in performance fabrics.

1.....
.....
.....
.....
.....
.....
.....

2.....
.....
.....
.....
.....
.....
.....

(2 x 3 marks)





10 (e) Describe **one** way in which electronics can be used in modern textile products.

.....

.....

.....

.....

.....

.....

.....

.....

.....

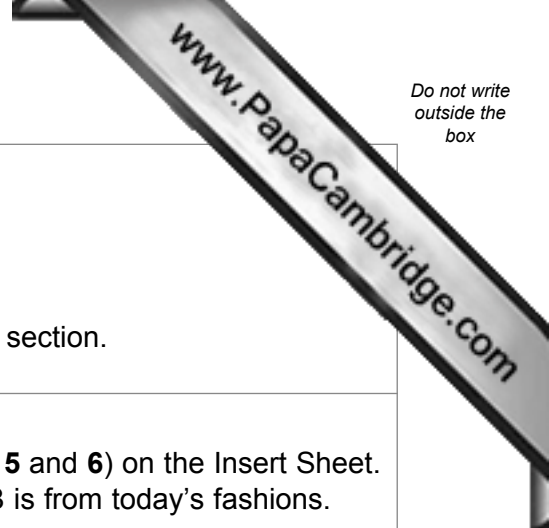
(4 marks)

| |
|----|
| |
| 20 |

Turn over for the next question

Turn over ▶





Section C

Answer the following question.

You are advised to spend about one hour on this section.

11 Study the photographs of the ladies' career wear (**Figures 5** and **6**) on the Insert Sheet. Outfit A was fashionable about 100 years ago, and Outfit B is from today's fashions.

11 (a) Analyse how these different outfits have been influenced by attitudes to women's roles in society in the times when they were fashionable.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

(5 marks)



11 (b) Compare the style of these two outfits in terms of their suitability for career wear.

.....
.....
.....
.....
.....
.....

(3 marks)

11 (c) The style of Outfit A would have been copied from a design originally intended for wealthy women. Compare this with today's sources of fashion ideas.

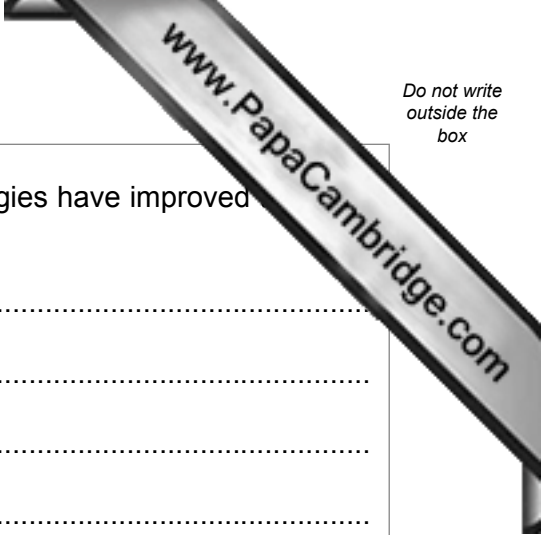
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

(6 marks)

Question 11 continues on the next page

Turn over ▶





11 (d) With reference to Outfit B, explain how new fabric technologies have improved performance of the wear and care of the outfit.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

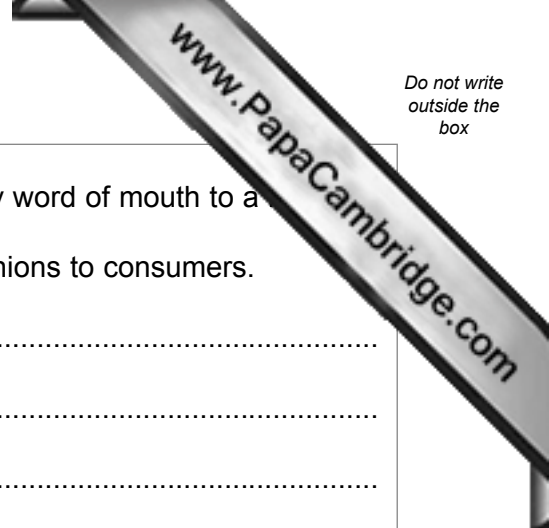
.....

.....

.....

.....

(6 marks)



11 (e)

Outfit A would have been advertised through journals or by word of mouth to a number of wealthy private clients.

Explain how new technology is used to market today's fashions to consumers.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

(5 marks)

Question 11 continues on the next page

Turn over ▶



11 (f) Both of the jackets (**Figures 5 and 6**) are lined. Explain the reasons for this.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

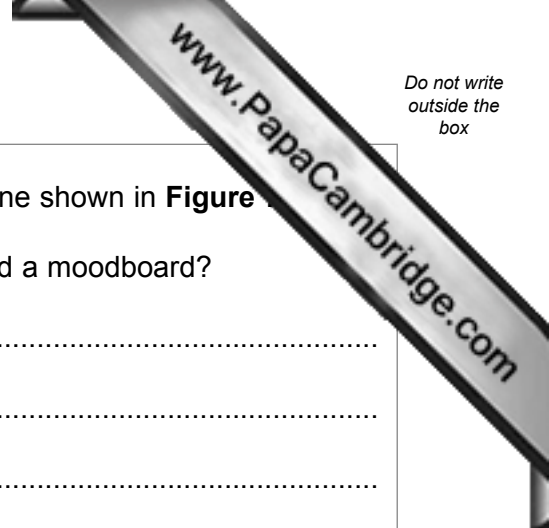
.....

.....

.....

.....

(6 marks)



11 (g) (i) A designer will put together a presentation board like the one shown in **Figure 7**.
insert sheet.

What are the differences between a presentation board and a moodboard?

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

(4 marks)

11 (g) (ii) Analyse the ways in which the designer has created interest in the collection shown through the presentation board (**Figure 7**).

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

(5 marks)

40

END OF QUESTIONS



