

Thursday 21 June 2012 – Afternoon

GCSE DESIGN AND TECHNOLOGY Textiles Technology

A572/01 Sustainable Design

Candidates answer on the Question Paper.

OCR supplied materials:

None

Other materials required:

None

Duration: 1 hour



Candidate forename		Candidate surname	
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Centre number						Candidate number				
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INSTRUCTIONS TO CANDIDATES

- Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
- Use black ink. HB pencil may be used for graphs and diagrams only.
- Answer **all** the questions in Section A **and** Section B.
- Read each question carefully. Make sure you know what you have to do before starting your answer.
- Write your answer to each question in the space provided. If additional space is required, you should use the lined pages at the end of this booklet. The question number(s) must be clearly shown.
- Do **not** write in the bar codes.

INFORMATION FOR CANDIDATES

- The number of marks is given in brackets [] at the end of each question or part question.
- The total number of marks for this paper is **60**.
- Your quality of written communication is assessed in the question marked with an asterisk (*).
- This document consists of **12** pages. Any blank pages are indicated.

Section A

Answer **all** questions.

You are advised to spend 15 minutes on this section.

On questions 1–5 **circle** your answer.

- 1** The kite mark is the symbol of the:
- (a) British Safety Institute
 - (b) British Safety Confederation
 - (c) School Safety Group
 - (d) British Standards Institute [1]
- 2** Faulty textile products are called:
- (a) Rejects
 - (b) Failures
 - (c) Mistakes
 - (d) Rubbish [1]
- 3** Providing good conditions for workers is:
- (a) A recycling issue
 - (b) A moral issue
 - (c) Not important
 - (d) A design issue [1]
- 4** When researching a primary resource refers to:
- (a) Using old magazines
 - (b) Looking on the internet
 - (c) Taking photographs
 - (d) Watching a DVD [1]

5 Polyester is made from:

- (a) Oil
- (b) Aluminium
- (c) Glass
- (d) Wool

[1]

6 The symbol shown stands for:



..... [1]

7 The ergonomics of a product refers to [1]

8 What does the term built-in obsolescence refer to?

..... [1]

9 What are the chemicals called that cause harm to people and animals?

..... [1]

10 In the context of a company's moral issues what does ETI stand for?

..... [1]

Decide whether each of the following statements is **true** or **false**.

Tick (✓) the box to show your answer.

11 Nylon is made from petroleum

True	False	
<input type="checkbox"/>	<input type="checkbox"/>	[1]

12 Geo textiles can be natural products

<input type="checkbox"/>	<input type="checkbox"/>	[1]
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13 Fairtrade products are always made in the UK

<input type="checkbox"/>	<input type="checkbox"/>	[1]
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14 Hemp is biodegradable

<input type="checkbox"/>	<input type="checkbox"/>	[1]
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15 Coir is a man-made fibre

<input type="checkbox"/>	<input type="checkbox"/>	[1]
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Total [15]

Turn over

Section B

Answer **all** questions.

You are advised to spend 45 minutes on this section.

16 Fig. 1 shows a bag made from recycled t-shirts.



Fig. 1

(a) (i) Name an alternative textile product that could be reused to make a bag.

..... [1]

(ii) Give **two** advantages of reusing these textile products for a bag.

1

.....

2

..... [2]

(b) The bag in Fig. 1 can be both functional and aesthetic.

Describe what is meant by the terms functional and aesthetic.

Functional

.....

.....

.....

.....

.....

..... [4]

17 Fig. 3 shows an Eco-friendly gillet made from recycled kites.



Fig. 3

(a) Identify **two** reused pre-manufactured components shown on the gillet in Fig. 3.

1

2 [2]

(b) List **four** points a designer would need to consider to ensure that the product is Eco-friendly.

1

.....

2

.....

3

.....

4

..... [4]

(c) Tertiary recycling is carried out in the textile industry.

Explain what is meant by tertiary recycling.

.....

.....

.....

..... [3]

18 Fibres such as Tencel and Lyocell have been designed to have as little effect on the environment as possible.

Fig. 4 shows a mattress cover made from Tencel fibres.

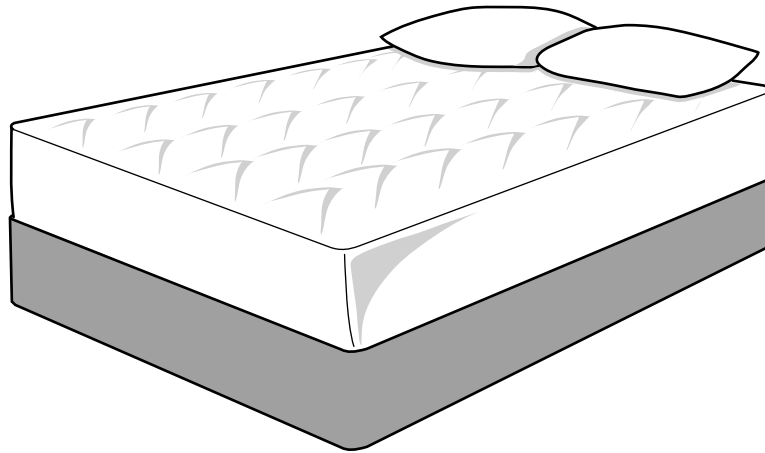


Fig. 4

(a) (i) Name the group of fibres that Tencel and Lyocell belong to.

..... [1]

(ii) State **two** advantages to the environment of using Tencel and Lyocell fibres.

1

.....

2

..... [2]

(iii) Give **two** performance characteristics of these fibres.

1

2

..... [2]

(b) The manufacturing of textile products consumes energy.

Name **two** renewable energy resources.

1

2

..... [2]

(c) Explain **two** advantages to society of using renewable energy.

1

.....

.....

2

.....

..... [4]

(d) Medical textiles use many smart and modern materials.

Give **four** examples of medical textiles that use smart and modern materials.

1

.....

2

.....

3

.....

4

..... [4]

Total [15]

