

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

Centre number

Candidate number

MODIFIED LANGUAGE

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** Textile products that are faulty 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** A primary resource in research 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 means:



[1]

7 The ergonomics of a product refers to [1]

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

[1]

9 What do you call chemicals that cause harm to people and animals?

[1]

10 What does ETI mean in the context of a company's moral issues?

[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**

☐

[1]

12 Geo textiles can be natural products

☐
☐

[1]

13 Fairtrade products are always made in the UK

☐
☐

[1]

14 Hemp is biodegradable

☐
☐

[1]

15 Coir is a man-made fibre

☐
☐

[1]

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 a different 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]

Aesthetic

.....

.....

.....

.....

.....

..... [4]

(c) Fig. 2 shows a label attached to the bag.

Fig. 2

Describe what this label means. Explain why this label is important to the consumer.

.....

.....

.....

.....

.....

.....

.....

..... [4]

Total [15]

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 make sure 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]

(d)* A designer must consider the product life cycle when designing new innovative products.

Explain what is meant by the term **product life cycle**.

[6]

Total [15]

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

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

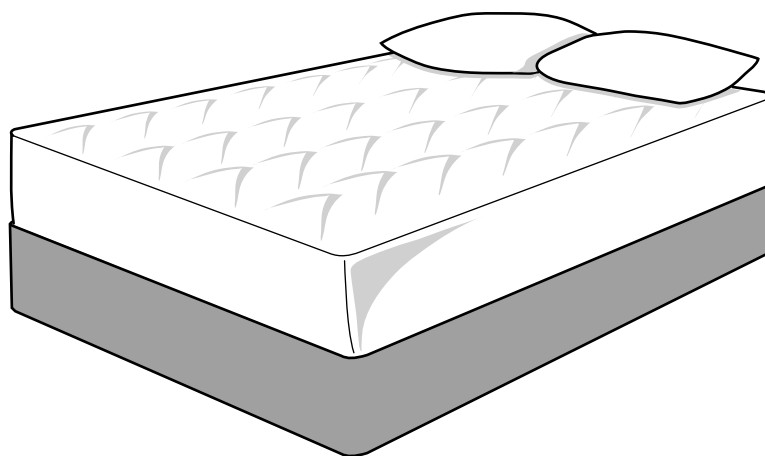


Fig. 4

- (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 this group of fibres.

1

2 [2]

- (b)** The manufacturing of textile products uses 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]

Additional Page

[illegible]

Additional Page

[illegible]

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Additional Page



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