

**GENERAL CERTIFICATE OF SECONDARY EDUCATION
DESIGN AND TECHNOLOGY**

A572

Textiles Technology
Sustainable Design

Candidates answer on the question paper.

OCR supplied materials:

None

Other materials required:

None

**Wednesday 22 June 2011
Morning**

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. Pencil may be used for graphs and diagrams only.
- 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. Additional paper may be used if necessary but you must clearly show your candidate number, centre number and question number(s).
- Answer **all** the questions.
- 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** Which of the following is primary recycling of garments?
- (a) Throwing away unwanted garments to landfill sites
 - (b) Burning unwanted garments
 - (c) Saving & storing garments
 - (d) Giving garments to a charity shop [1]
- 2** Anthropometrics refers to:
- (a) The study of fibres
 - (b) The study of people and measurements
 - (c) Genetic data of people
 - (d) Fabric and fibre blends [1]
- 3** Product globalisation refers to:
- (a) Products only available in the UK
 - (b) Products made in the UK
 - (c) Products available around the world
 - (d) Products made in Europe [1]
- 4** Eco-friendly materials are materials that:
- (a) Are made in third world countries
 - (b) Use non renewable resources
 - (c) Use toxic chemicals
 - (d) Use natural sustainable resources [1]
- 5** A sweatshop is a term used to describe:
- (a) A factory with poor working conditions
 - (b) A factory specialising in manufacturing sweaters
 - (c) A hot and sweaty environment
 - (d) A factory specialising in garments [1]

6 The symbol shown stands for:



..... [1]

7 What does RFID stand for?

..... [1]

8 What is the name of smart materials that respond to heat?

..... [1]

9 What is meant by the term Life Cycle?

..... [1]

10 Name the term used to describe redundant products and their disposal.

..... [1]

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

Tick (✓) the box to show your answer.

	True	False	
11 Recycle means to buy a new product	<input type="checkbox"/>	<input type="checkbox"/>	[1]
12 GoreTex is a natural fibre	<input type="checkbox"/>	<input type="checkbox"/>	[1]
13 BSI stands for British Safety Insurance	<input type="checkbox"/>	<input type="checkbox"/>	[1]
14 The country of origin is always on a garment label	<input type="checkbox"/>	<input type="checkbox"/>	[1]
15 Toxic pesticides cannot be used on organic cotton	<input type="checkbox"/>	<input type="checkbox"/>	[1]

Total [15]

Section B

Answer **all** questions.

You are advised to spend 45 minutes on this section.

16 Fig. 1 shows an umbrella.

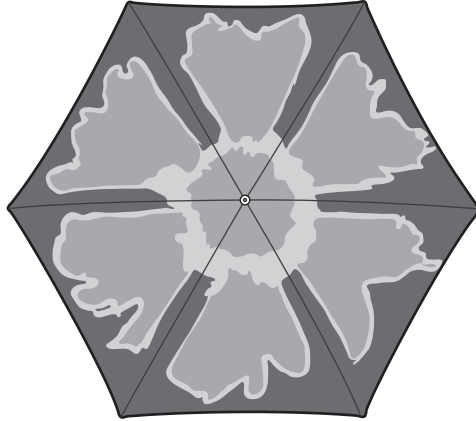


Fig.1

(a) The umbrella has been made from recycled materials.

Give **four** advantages of using recycled materials.

Advantage 1

Advantage 2

Advantage 3

Advantage 4 **[4]**

(b) The fabric of the umbrella has a high percentage of polyester fibres.

Give **two** disadvantages to the environment of using polyester fibres.

Disadvantage 1

.....

Disadvantage 2

..... [2]

(c) The umbrella is to be packaged before being transported to the shops.

Identify **four** reasons why the umbrella is to be packaged.

1.....

.....

2.....

.....

3.....

.....

4.....

..... [4]

(d) Some packaging used today is not environmentally friendly.

Give **four** examples of non-environmentally friendly packaging.

1

2

3

4

[4]

(e) Name **one** national textile company that has an Eco-friendly policy for its products.

..... [1]

Total [15]

17 Fig. 2 shows an unwanted old 100% cotton duvet cover.



Fig. 2

(a) Identify **one** different way for each of the 6Rs in which the cotton duvet cover can be used.

Recycle

.....

Reuse

.....

Reduce

.....

Refuse

.....

Rethink

.....

Repair

..... [6]

(b) The duvet cover has a care label with the following logo as shown in Fig. 3.

Fig. 3

What is the name of the logo shown in Fig. 3?

..... [1]

(c) Name and draw **one** other logo or symbol that could be found on the label for the 100% cotton duvet cover.

.....

[2]

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PLEASE DO NOT WRITE ON THIS PAGE

18 Fig. 4 shows a spinning wheel. The spinning wheel is used to produce hand spun natural yarns.

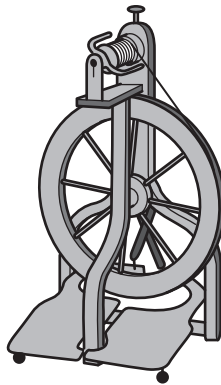


Fig. 4

(a) (i) Name **one** fibre that could be used to produce hand spun natural yarns.

..... [1]

(ii) Give **two** environmental advantages of natural fibres.

1

.....

2

..... [2]

(b) Identify **three** benefits to the environment of hand spun fibres.

Benefit 1

.....

.....

Benefit 2

.....

.....

Benefit 3

.....

..... [3]

(c) Explain what is meant by the term 'smart & modern' materials.

.....
.....
.....
.....
.....
.....
.....
..... [4]

(d) Name **three** different examples of smart textiles.

1

2

3

..... [3]

(e) Explain **one** advantage to the consumer of technological advances and changing styles in materials.

.....
.....
.....
..... [2]

Total [15]

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