

Candidate forename						Candidate surname					
Centre number						Candidate number					

**OXFORD CAMBRIDGE AND RSA EXAMINATIONS**  
**GCSE**

**A572/01**

**DESIGN AND TECHNOLOGY**

**Textiles Technology**

**Sustainable Design**

**THURSDAY 21 JUNE 2012: Afternoon**

**DURATION: 1 hour**  
**plus your additional time allowance**

**MODIFIED ENLARGED**

**Candidates answer on the Question Paper.**

**OCR SUPPLIED MATERIALS:**

**None**

**OTHER MATERIALS REQUIRED:**

**None**

**READ INSTRUCTIONS OVERLEAF**

## **INSTRUCTIONS TO CANDIDATES**

- **Write your name, centre number and candidate number in the boxes on the first page. 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.**

## **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 (\*).**

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## **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.

**TRUE    FALSE**

**11   Nylon is made from petroleum**      ☐      ☐      **[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]**

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## 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]**

## AESTHETIC

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[4]

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

**Fig. 2**

**Describe what this label means and why it is important to the consumer.**

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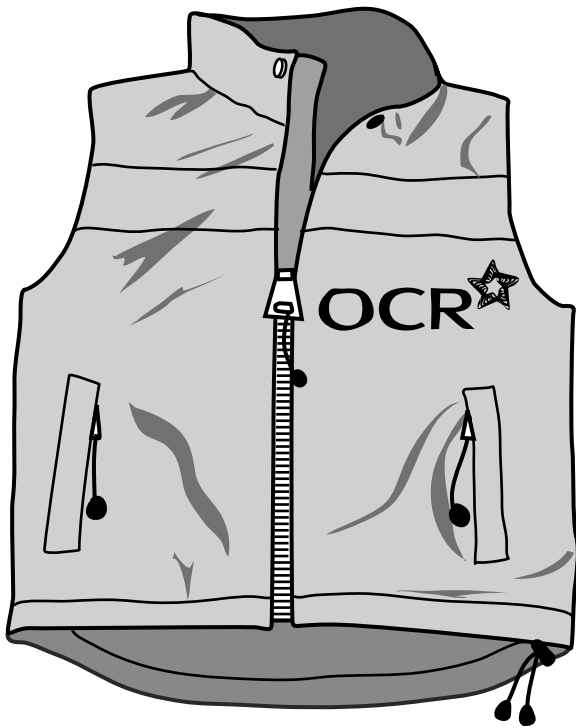
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**[4]**

**Total [15]**

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**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]**

**(d)\* When designing new innovative products a designer must consider the product life cycle.**

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

[illegible]



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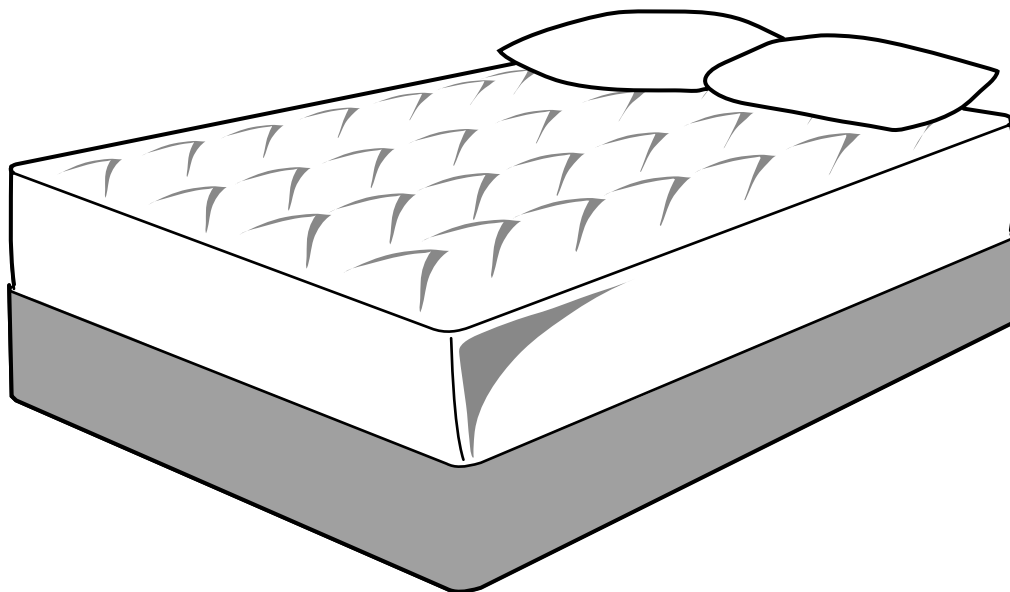
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[6]

**Total [15]**

- 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]**

[illegible]

[illegible]

[illegible]

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