

Wednesday 22 May 2013 – 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

MODIFIED LANGUAGE



Candidate
forename

Candidate
surname

Centre number

Candidate number

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 A source of natural fibres is:

- (a) Oil
- (b) Tyres
- (c) Alpaca
- (d) Plastic bottles

[1]

2 Making a product out of date after a limited amount of time is called:

- (a) Expired warranty
- (b) Technological obsolescence
- (c) Safety obsolescence
- (d) Planned obsolescence

[1]

3 Assessing the potential dangers in a factory is officially termed:

- (a) Machinery assessment
- (b) COSHH
- (c) Risk assessment
- (d) Health and safety assessment

[1]

4 Chemicals that cause harm to people are called:

- (a) Toxic chemicals
- (b) Unfit products
- (c) Bio chemicals
- (d) Waste products

[1]

5 Thermo-chromic dyes are:

- (a) Insulating
- (b) Heat sensitive
- (c) Fire resistant
- (d) Waterproof

[1]

6 Give the meaning of this symbol.



[1]

7 Name the logo used to show a product is made from recycled materials

[1]

8 Explain what RFID stands for.

[1]

9 Name **one** fibre made from oil.

[1]

10 What are materials that decompose naturally called?

[1]

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

Tick (✓) the box to show your answer.

11 Smart materials all contain microchip technology

True False

☐
☐

[1]

12 Cold water dyes use less water

☐
☐

[1]

13 Shredded textiles are secondary recycling

☐
☐

[1]

14 Acetate is a natural fibre

☐
☐

[1]

15 Textile products could be made using can ring pulls

☐
☐

[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 pair of denim jeans with an embellished pocket.

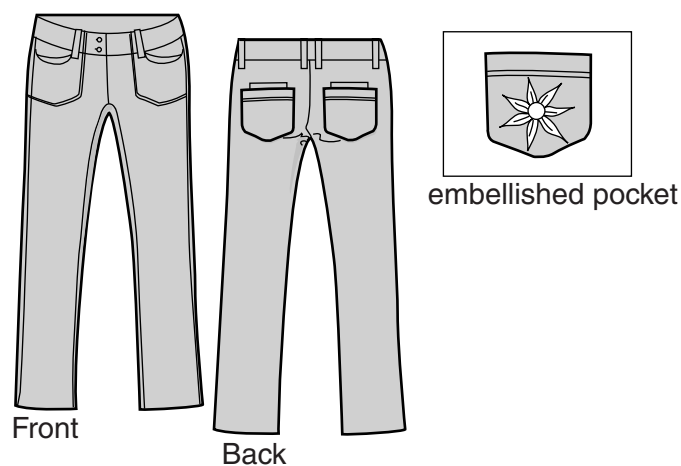


Fig. 1

- (a)** The denim is made from 100% cotton.

Give **three** environmentally friendly reasons for using 100% cotton.

1

.....

2

.....

3

.....

[3]

- (b)** The manufacturer for the denim jeans will only use natural dyes.

Give **two** sources of natural dyes.

1

.....

2

.....

[2]

(c) Name **three** methods of producing an embellished handmade design.

1

2

3

[3]

(d) The back pocket on the jeans has an embellished handmade design.

Identify **three** social advantages of manufacturing by hand.

1

.....

2

.....

3

.....

[3]

(e) Elastane fibres are to be added to the denim jeans to give them a better fit.

Explain the disadvantages to the environment of manufacturing the jeans with elastane fibres.

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.....

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.....

.....

..... [4]

Total [15]

17 Many bags are made from recycled textile items.

Fig. 2 shows a laptop case made from recycled seatbelts.

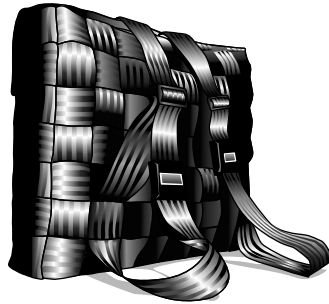


Fig. 2

(a) Name **two** household textile products that could be recycled to make a bag.

1

2 [2]

(b) New products should have 'sustainable design' as a specification point.

Explain how a designer could consider the following:

(i) The sustainable use of materials.

.....

 [3]

(ii) The carbon footprint of the product.

.....

 [3]

(iii) The recycling or disposal of a product.

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.....

..... [3]

(c) A bag is to be designed for use with young children.

Give **four** points a designer would need to consider when designing the bag.

1

.....

2

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3

.....

4

.....

[4]

Total [15]

18 Fig. 3 shows a child's toy that was manufactured abroad.

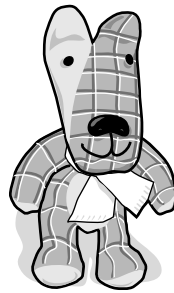


Fig. 3

(a)* Discuss the social and moral effects of consumers buying cheap textile products that were manufactured abroad.

Marks will be awarded for the quality of written communication in your answer.

[6]

- (b) A child's toy must have a safety symbol attached.

In the space, sketch and label **one** symbol used to show that a textile toy meets safety standards.

[2]

- (c) Name the term used when a product is made in one country and sold in another.

..... [1]

- (d) Computer technology is used worldwide within the textiles industry.

Explain **three** benefits to the environment of using computer technology.

1

.....

.....

2

.....

.....

3

.....

.....

[6]

Total [15]

END OF QUESTION PAPER

[illegible]

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