

**OXFORD CAMBRIDGE AND RSA EXAMINATIONS
GCSE**

A575/01

DESIGN AND TECHNOLOGY

Textiles Technology

**Sustainability and Technical Aspects of
Designing and Making**

FRIDAY 25 MAY 2018: Afternoon

**DURATION: 1 hour 30 minutes
plus your additional time allowance**

MODIFIED ENLARGED 36pt

Candidate forename		Candidate surname	
-------------------------------	--	------------------------------	--

Centre number						Candidate number				
--------------------------	--	--	--	--	--	-----------------------------	--	--	--	--

Candidates answer on the Question Paper.

OCR SUPPLIED MATERIALS:

Loose sheet for Question 18

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.

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 in Section A AND Section B.

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 80.

Your quality of written communication is assessed in the questions marked with an asterisk (*).

SECTION A

Answer ALL the questions.

You are advised to spend about 40 minutes on this section.

On questions 1–5 circle your answer.

1 Which of the following is a natural fibre? [1]

(a) Acrylic

(b) Viscose

(c) Wool

(d) Polyester

2 Solar power is: [1]

- (a) A renewable energy source**
- (b) A non-renewable energy source**
- (c) A recyclable form of energy**
- (d) A non-recyclable form of energy**

3 The eco-footprint of a garment is: [1]

- (a) Information about how to return a faulty garment**
- (b) How much it costs to manufacture a garment**
- (c) How much carbon dioxide is caused by the manufacture of a garment**
- (d) How to safely dispose of an unwanted garment**

4 Polartec fleece is made from: [1]

(a) Recycled fleece garments

(b) Recycled old clothes

(c) Recycled plastic bags

(d) Recycled plastic bottles

5 To rethink a product means to: [1]

(a) Take it apart

(b) Re-design it

(c) Use it again

(d) Mend it when it is broken

6 Give the term used to describe the stage a product goes through from conception to decomposition.

_____ [1]

7 Give the term that describes the second hand use of a product.

_____ [1]

8 The symbol below stands for:



_____ [1]

9 Which ONE word describes a country's traditions, skills, religions or beliefs?

_____ [1]

10 Complete the following to give the meaning of the abbreviation ITCLC.

International C_____

L_____ Code [1]

Decide whether the following statements below are TRUE or FALSE.

Tick [✓] the box to show your answer.

TRUE FALSE

11 Ergonomics is the study of a person's lifestyle. ☐ ☐ **[1]**

12 Reusing garments is good for the environment. ☐ ☐ **[1]**

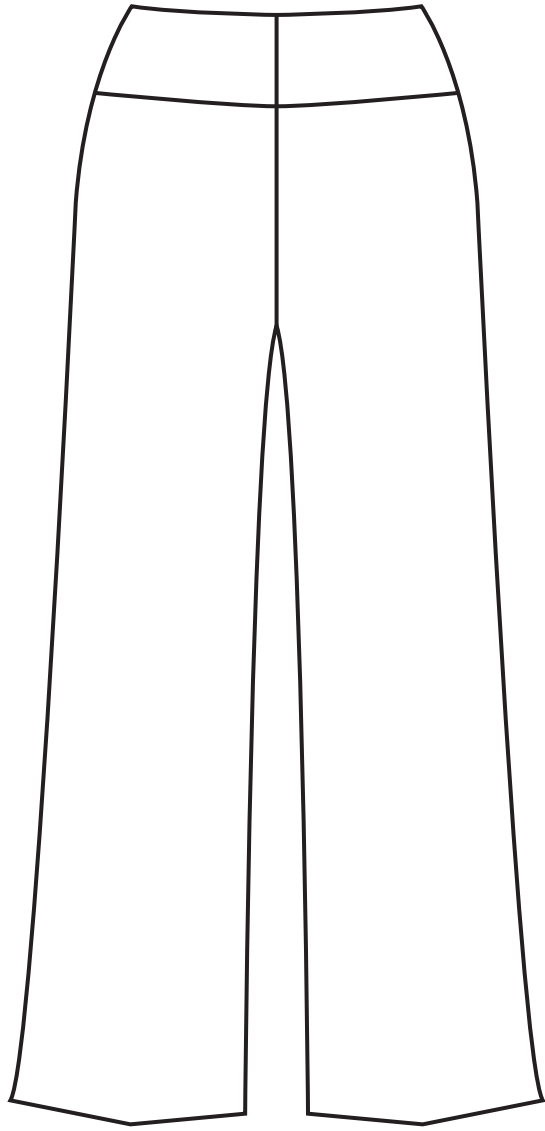
13 Built-in obsolescence in products is environmentally friendly. ☐ ☐ **[1]**

14 Hydropower is not sustainable. ☐ ☐ **[1]**

15 Neoprene is a manmade fabric. ☐ ☐ **[1]**

16 Fig. 1 shows a pair of viscose (rayon) trousers.

FIG. 1



(a) Give FOUR performance characteristics of viscose (rayon) that make it a suitable fabric for the trousers.

1 _____

2 _____

3 _____

4 _____

[4]

(b) Viscose (rayon) is a regenerated fibre.

Explain what is meant by a regenerated fibre.

[2]

(c) State TWO advantages to the environment of regenerated fibres.

1 _____

2 _____

[2]

(d) The viscose (rayon) trousers shown in Fig. 1 are to be modified to be worn at a summer music festival.

In the space opposite, sketch a design for the modified trousers.

Your design must show:

disposal of fullness

pattern and colours

a decorative technique.

Annotate your sketch to show all design, colours and construction details. [6]

Sketch your design below

(e)* Some garments are manufactured abroad in sweatshops.

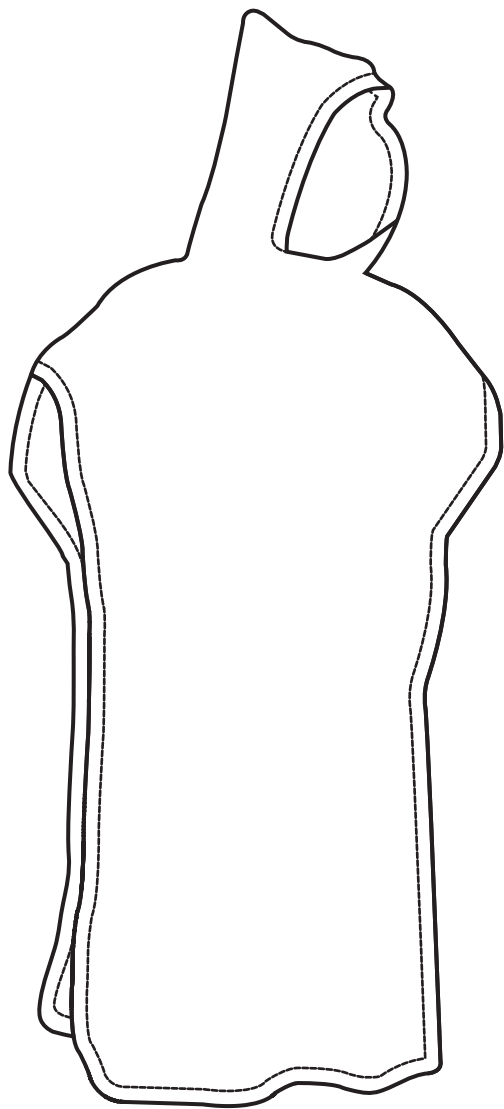
Explain why consumers may refuse to buy a garment manufactured abroad in a sweatshop. [6]

SECTION B

You are advised to spend 50 minutes on this section.

17 Fig. 2 shows a beach poncho.

FIG. 2



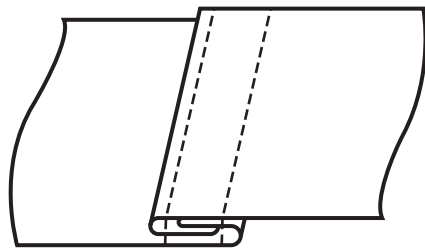
(a) The beach poncho is made from cotton terry towelling fabric.

Explain why cotton terry towelling fabric is suitable for the poncho.

[4]

- (b) Fig. 3 shows the seam used to make the poncho.**

FIG. 3



- (i) Name the seam shown in Fig. 3.**

_____ [1]

- (ii) Give TWO reasons why this is a suitable seam for the poncho.**

1 _____

2 _____

[2]

- (c) State TWO methods of neatening the edge of the poncho.**

1 _____

2 _____

[2]

[illegible]

18 Look at Fig. 4 and Fig. 5 on the Loose Sheet.

(a) Identify FOUR errors that have been made in the pattern lay shown in Fig. 5.

1 _____

2 _____

3 _____

4 _____

[4]

(b) Explain TWO problems that could result from an incorrect pattern lay.

1 _____

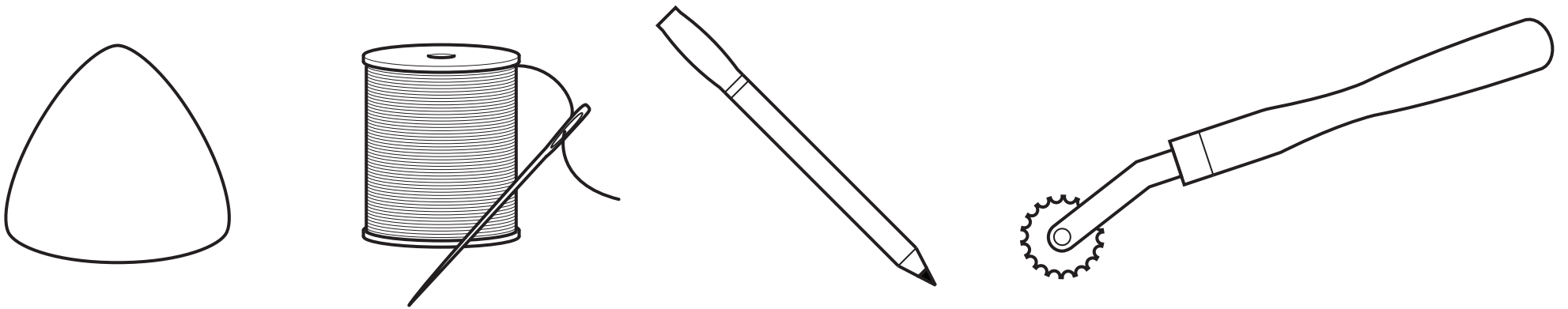
_____ **[2]**

2 _____

_____ **[2]**

(c) Fig. 6 shows some equipment that could be used to transfer pattern markings to fabric.

FIG. 6



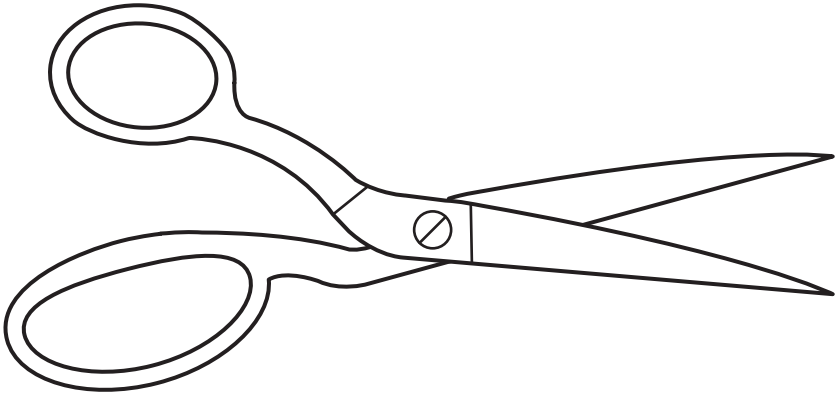
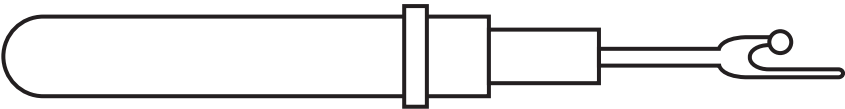
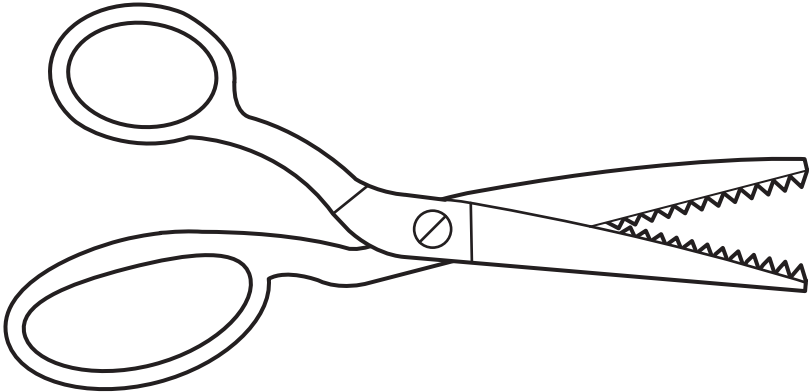
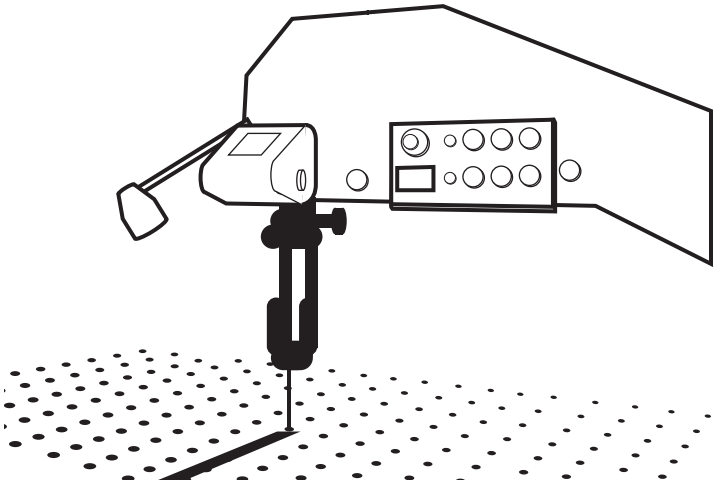
Name TWO methods of transferring pattern markings to fabric.

1 _____

2 _____

[2]

(d) (i) The table below shows a range of tools used for cutting. Name the tools shown. The first one has been done for you. [3]

Tool	Name
	Dressmaker's shears
	
	
	

(ii) Give ONE advantage and ONE disadvantage of using industrial cutting tools rather than scissors when manufacturing in quantity.

Advantage _____
_____ **[1]**

Disadvantage _____
_____ **[1]**

19 Fig. 7 shows a child's school bag with an appliquéd decoration.

FIG. 7



(a) Describe, using notes and/or diagrams, how to work appliqué. [6]

(b) Give THREE components that could be used to add interest to the bag.

1 _____

2 _____

3 _____

[3]

(c) Primary school children are encouraged to wear a hat in the playground to protect them from the sun.

The hat should:

protect the child from the sun

be suitable for boys and girls.

In the space opposite, sketch a design for a sun hat.

Annotate your sketch to show design, colour and construction details. [6]

Sketch your design below

Copyright Information

OCR is committed to seeking permission to reproduce all third-party content that it uses in its assessment materials. OCR has attempted to identify and contact all copyright holders whose work is used in this paper. To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced in the OCR Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download from our public website (www.ocr.org.uk) after the live examination series.

If OCR has unwittingly failed to correctly acknowledge or clear any third-party content in this assessment material, OCR will be happy to correct its mistake at the earliest possible opportunity.

For queries or further information please contact the Copyright Team, First Floor, 9 Hills Road, Cambridge CB2 1GE.

OCR is part of the Cambridge Assessment Group; Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.