

Write your name here

Surname

Other names

**Pearson
Edexcel GCSE**

Centre Number

--	--	--	--	--

Candidate Number

--	--	--	--

Design and Technology: Textiles Technology

Unit 2: Knowledge and Understanding of Textiles Technology

Tuesday 19 May 2015 – Morning

Time: 1 hour 30 minutes

Paper Reference

5TT02/01

You do not need any other materials.

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- If pencil is used for diagrams/sketches it must be dark (HB or B). Coloured pens, pencils and highlighter pens must **not** be used.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided
– *there may be more space than you need.*

Information

- The total mark for this paper is 80.
- The marks for **each** question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*
- Questions labelled with an **asterisk** (*) are ones where the quality of your written communication will be assessed
– *you should take particular care on these questions with your spelling, punctuation and grammar, as well as the clarity of expression.*

Advice

- Read each question carefully before you start to answer it.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ►

P44815A

©2015 Pearson Education Ltd.

5/5/6/5/5/3/1/1



PEARSON

Answer ALL questions.





Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

1 Velcro® can be used for which **one** of the following?

- A Moulding
- B Fusing
- C Insulating
- D Fastening

(Total for Question 1 = 1 mark)

2 Which **one** of these symbols shows the notch pattern marking?

- A 
- B 
- C 
- D 

(Total for Question 2 = 1 mark)

3 What is the other name commonly used for polyamide?

- A Lycra®
- B Nylon
- C Elastane
- D Acrylic

(Total for Question 3 = 1 mark)

4 Which **one** of the following decorative techniques uses wax?

- A Batik
- B Tie and dye
- C Screen printing
- D Silk painting

(Total for Question 4 = 1 mark)



5 Which **one** of the following does the term 'reduce' apply to when considering the environment?

- A Product life
- B Spending
- C Materials and energy
- D Recycling

(Total for Question 5 = 1 mark)

6 Which **one** of the following best describes the CAD/CAM grading process in textiles?

- A The designing of pattern pieces
- B The cutting out of pattern pieces
- C The sizing up or down of pattern pieces
- D The laying out of pattern pieces

(Total for Question 6 = 1 mark)

7 Which **one** of the following is a characteristic of linen fibre?

- A Stretchy
- B Non-absorbent
- C Crease resistant
- D Strong

(Total for Question 7 = 1 mark)

8 Which **one** of the following is a biological finish?

- A Brushing
- B Biostoning
- C Biometrics
- D Bleaching

(Total for Question 8 = 1 mark)



9 Which modern synthetic fibre can be used to keep warm in winter?

- A Viscose
- B Kevlar®
- C Acetate
- D Polartec

(Total for Question 9 = 1 mark)

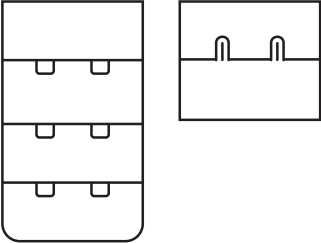
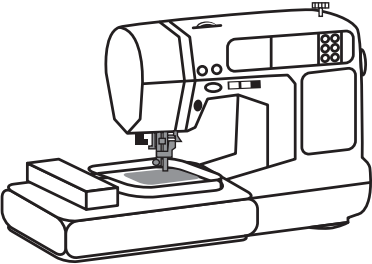
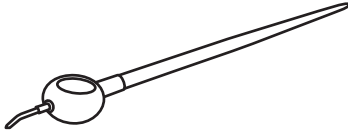
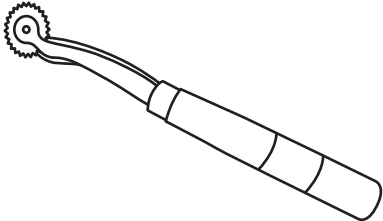
10 Which **one** of the following best describes a ply of yarn?

- A Fibres tangled together
- B Strands of yarn twisted together
- C Yarns that have been heat treated
- D Yarns that have been coloured

(Total for Question 10 = 1 mark)

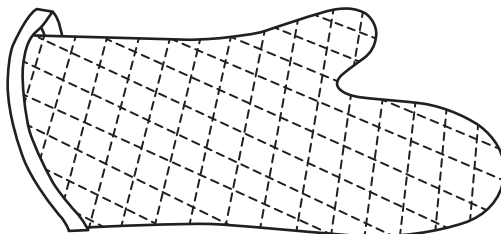


11 (a) The table below shows some equipment and components.
Complete the table by giving the missing names and uses.

Components/Equipment	Name	Use
	(1)	To open and close/to fasten, to decorate
	CAD/CAM embroidery machine	(1)
	(1)	A traditional tool used to apply hot wax to fabric
	(1)	To transfer markings onto fabric, to use with carbon paper or tailors chalk



(b) The drawing below shows an oven glove.



(i) Name the stitch technique shown on the oven glove. (1)

.....

(ii) State **one** quality control you would use whilst completing this technique. (1)

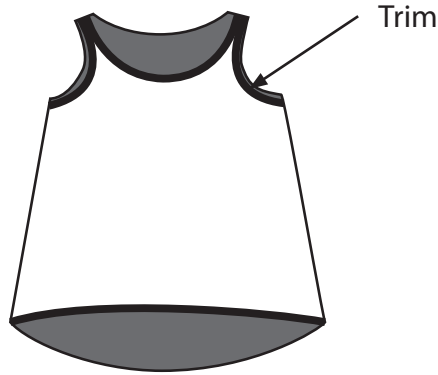
.....

(iii) Describe **one** way in which an oven glove can be made safe when in use. (2)

.....
.....
.....
.....



(c) The drawing below shows a vest made from plain woven Tencel®.



(i) The fabric for the trim on the vest has been cut at 45 degrees, diagonally across the grain of the fabric.

Name the position on the fabric where the trim has been cut.

(1)

.....

(ii) Describe **one** benefit of cutting from this position on the fabric.

(2)

.....
.....
.....

(iii) Give **two** characteristics of a plain weave.

(2)

1

2

(iv) Describe **one** benefit of Tencel® to the environment.

(2)

.....
.....
.....



(v) Give **one** property of Tencel® that makes it suitable for a vest.

Give **one** reason for your property.

(2)

Property

.....

Reason

.....

.....

(d) Describe **one** piece of information that the symbol below shows.



(2)

.....

.....

.....

.....

(Total for Question 11 = 19 marks)

.....



BLANK PAGE
QUESTION 12 BEGINS ON THE NEXT PAGE.



12 A local nursery school has asked you to design a garment to keep the under 5s' uniforms clean when doing 'messy' play.

Design specification

The specification for the garment is that it must:

- consist of one garment that covers most of their uniform
- identify which child it belongs to
- be comfortable to wear
- be safe to wear
- be easy to care for
- be easy for the child to put on and take off
- include decorative techniques
- be easy to hang or store

In the spaces opposite, use sketches and, where appropriate, brief notes to show **two different** design ideas for the garment that meet the specification points above.

Candidates are reminded that if a pencil is used for diagrams/sketches it must be dark (HB or B).

Coloured pens, pencils and highlighter pens must **not** be used.

**PLEASE DO NOT WRITE OR DRAW IN THIS SPACE.
PLEASE USE THE SPACES OPPOSITE FOR YOUR DESIGNS.**



Design idea 1

(8)

Design idea 2

(8)

(Total for Question 12 = 16 marks)



13 The pictures below show a satin woven 100% silk, reversible ladies dressing gown.



Printed motif on jade green background



Black with jade green pocket detail

Embroidered dragon on black background



(a) Give **two** characteristics of silk, other than being comfortable to wear, that make it suitable for the dressing gown.

For each characteristic, justify your answer.

(4)

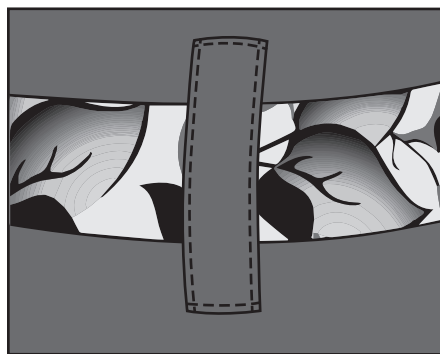
Characteristic 1

Justification

Characteristic 2

Justification

(b) The picture below shows a top-stitched belt loop.



Describe why top-stitching was used in the construction of the belt loops for the dressing gown.

(2)



(c) Explain **one** social, moral or cultural issue that the designer may have considered before designing this dressing gown.

(2)

.....

.....

.....

.....

(d) Explain why the dressing gown is successful in meeting the following specification point.

(2)

Versatile

.....

.....

.....

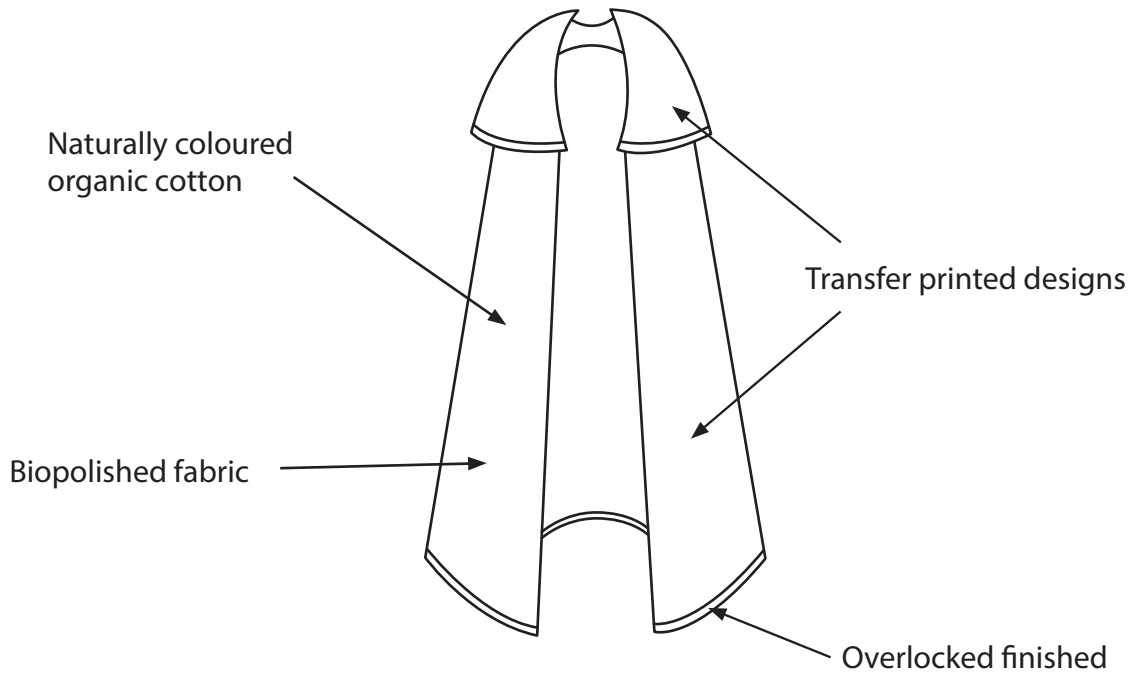
.....



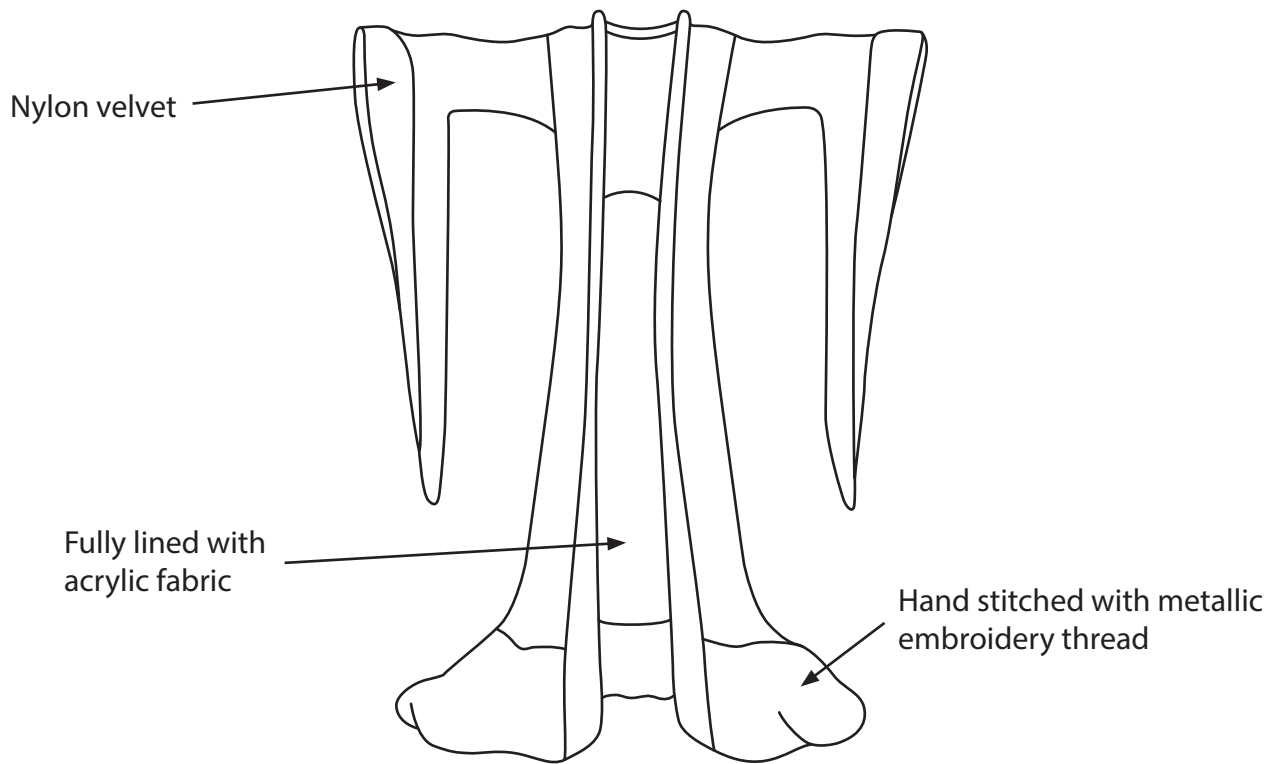
BLANK PAGE
QUESTION 13 CONTINUES ON THE NEXT PAGE.



* (e) Product A and Product B show **two** fancy dress robes.



Product A



Product B



Compare Product A with Product B in terms of environmental considerations, scale of production and cost.

(6)

Dotted lines for writing.

(Total for Question 13 = 16 marks)



14 (a) State **two** ways that material can be laminated.

(2)

1

.....

2

.....

(b) (i) Weft hand knitting using needles has now become very popular.

Name **one** weft hand knitting stitch or **one** combination stitch.

(1)

.....

(ii) Name the **two** types of machine used in knitting.

(2)

1

.....

2

.....

(c) Describe how needle felt is made.

(2)

.....

.....

.....

.....

(d) Explain **one** benefit of clip art to designers.

(2)

.....

.....

.....

.....



(e) Describe **one** advantage of using CD ROMs in the textile industry.

(2)

.....

.....

.....

.....

(f) Silk painting can be expensive to produce.

Describe **one** other disadvantage of the silk painting process.

(2)

.....

.....

.....

.....



***g**) Discuss the benefits of 2D/3D virtual modelling and testing for the designer's client and the consumer.

(6)

[Area with horizontal dotted lines for writing the answer to Question 14g.]

(Total for Question 14 = 19 marks)

TOTAL FOR PAPER = 80 MARKS

