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Other names

Pearson
Edexcel GCSE

Centre Number

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Candidate Number

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Design and Technology:
Textiles Technology
Unit 2: Knowledge and Understanding
of Textiles Technology

Tuesday 24 May 2016 – 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 ►

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Answer ALL questions.

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

1 Which **one** of the following is usually the most expensive method of manufacturing?

- A** Batch
- B** Production line
- C** Mass
- D** One-off

(Total for Question 1 = 1 mark)

2 Which **one** of the following applies to felted fabric?

- A** It has a warp and a weft
- B** It is very strong
- C** It is made from yarn
- D** It is made directly from fibres

(Total for Question 2 = 1 mark)

3 On a garment, which **one** of the following positions is a facing likely to be used?

- A** Straight hem
- B** Shaped neck line
- C** Side seam
- D** Centre back seam

(Total for Question 3 = 1 mark)

4 Which **one** of the following is a regenerated fibre?

- A** Linen
- B** Polyester
- C** Acetate
- D** Acrylic

(Total for Question 4 = 1 mark)

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5 An overlapped closed seam has:

- A One raw edge overlapped but not the other
- B Both raw edges overlapped together
- C Both raw edges left without overlapping
- D Both raw edges overlapped separately

(Total for Question 5 = 1 mark)

6 Computer-aided manufacturing (CAM) is used in Textiles for which **one** of the following tasks:

- A Modelling
- B Creating and modifying designs
- C Lay planning and cutting
- D Costing

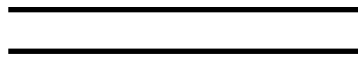
(Total for Question 6 = 1 mark)

7 Which **one** of the following statements best describes voile fabric?

- A A knitted opaque fabric
- B A densely woven twill fabric
- C A slightly see through plain woven fabric
- D A shiny fabric with weft threads floating over warp

(Total for Question 7 = 1 mark)

8 The diagram below shows a commercial pattern marking.



Which **one** of the following does the diagram show?

- A Lengthen or shorten the pattern here
- B Place on fold
- C Position and size of button hole
- D Dart to reduce fullness

(Total for Question 8 = 1 mark)



9 Which **one** of the following is the best seam type for sheer fabric?

- A Open
- B Closed
- C Overlocked
- D French

(Total for Question 9 = 1 mark)

10 Which **one** of the following fabrics is made with a plain weave?

- A Twill
- B Tweed
- C Velvet
- D Taffeta

(Total for Question 10 = 1 mark)



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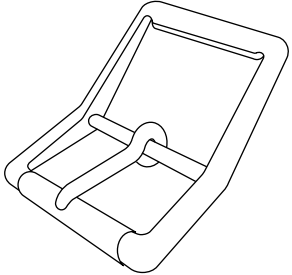
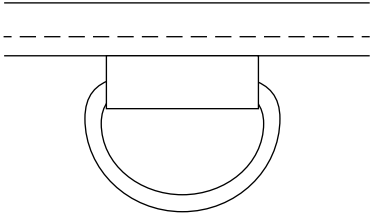
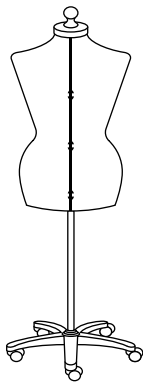
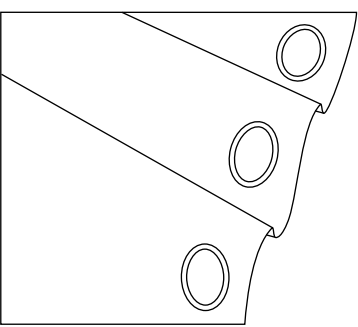
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QUESTION 11 BEGINS ON THE NEXT PAGE.



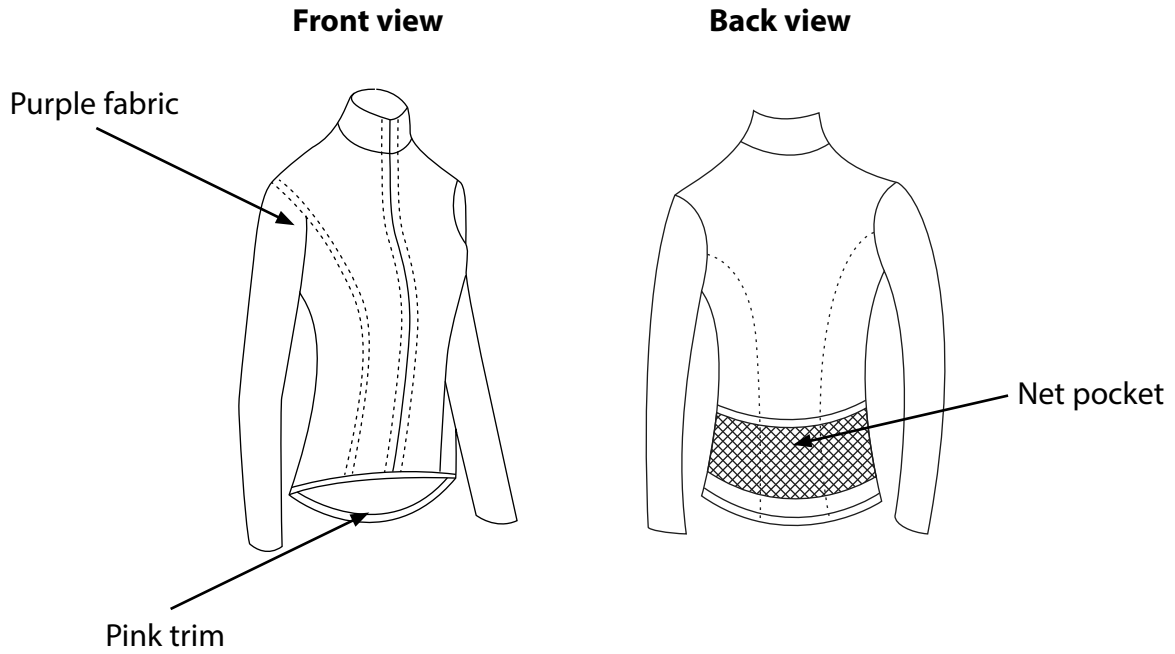
11 (a) The table below shows some components and equipment.

Complete the table by giving the missing names and uses.

Components/Equipment	Name	Use
	(1)	To fasten garments or shoes, open and close/to attach fabric together, join, attach, hold secure two loose ends
	(1)	Component used to support a large amount of weight
	Dressmakers dummy/ mannequin	(1)
	Eyelets	(1)



(b) The drawings below show a ladies' sports jacket made from closely knitted microfibre, cotton and Lycra®.



(i) Name **one** fibre that microfibres are made from.

(1)

(ii) State **one** characteristic of closely knitted microfibre that makes it a suitable choice for the sports jacket and give a reason why.

(2)

Characteristic

Reason

(iii) Explain **one** benefit of using cotton and Lycra® **together** in the sports jacket.

(2)



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(c) (i) Explain **one** suitable aftercare method for washing cotton and Lycra® fabric. (2)

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(ii) Explain **one** suitable aftercare method for drying **or** ironing cotton and Lycra® fabric. (2)

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(d) The back view of the jacket shows pockets made from net fabric.
(i) Name the construction method used to make net fabric. (1)

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.....

(ii) Explain why net fabric is a suitable choice for the pocket. (2)

.....

.....



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(e) The manufacturers would like to adapt the sports jacket to make it more appealing to men.

(i) Suggest **one** adaptation that you would make to the shape of the sports jacket to make it more suitable for men.

(1)

(ii) Explain how this adaptation would make the sports jacket more suitable for men.

(2)

(Total for Question 11 = 19 marks)



12 A shop would like to produce a range of sun hats. You have been asked to design **two** different children's sun hats that are made from textiles.

The specification for the sun hat is that it must:

- clearly reflect a seaside theme
- be adjustable to fit a range of heads
- be able to be transported in luggage
- use a hardwearing construction method
- use a surface decorative technique
- be suitable for sunny weather
- be made from easy care textile fabric/material
- be comfortable to wear.

In the spaces opposite, use sketches and, where appropriate, brief notes to show **two different** design ideas for the children's sun hat 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.

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PLEASE USE THE SPACES OPPOSITE FOR YOUR DESIGNS.**



Design idea 1

(8)

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Design idea 2

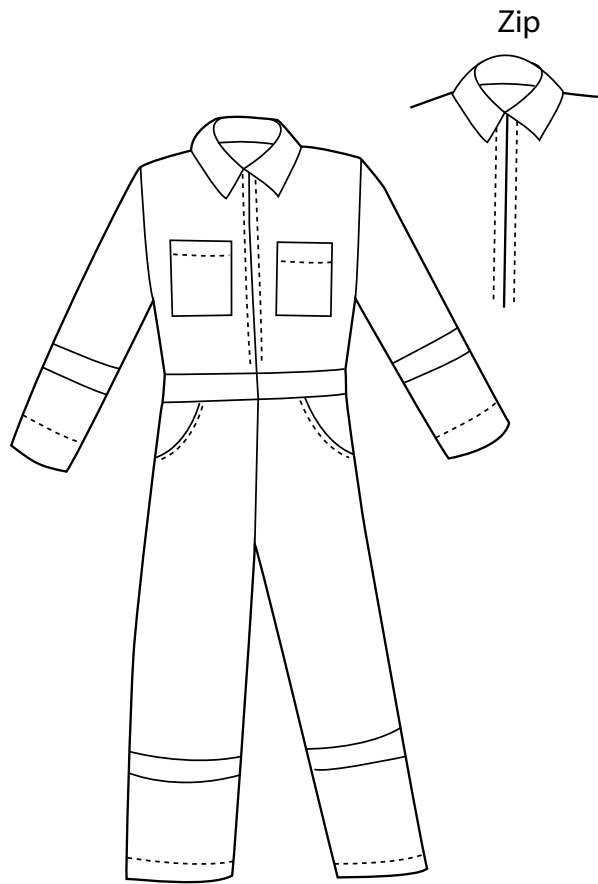
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(Total for Question 12 = 16 marks)

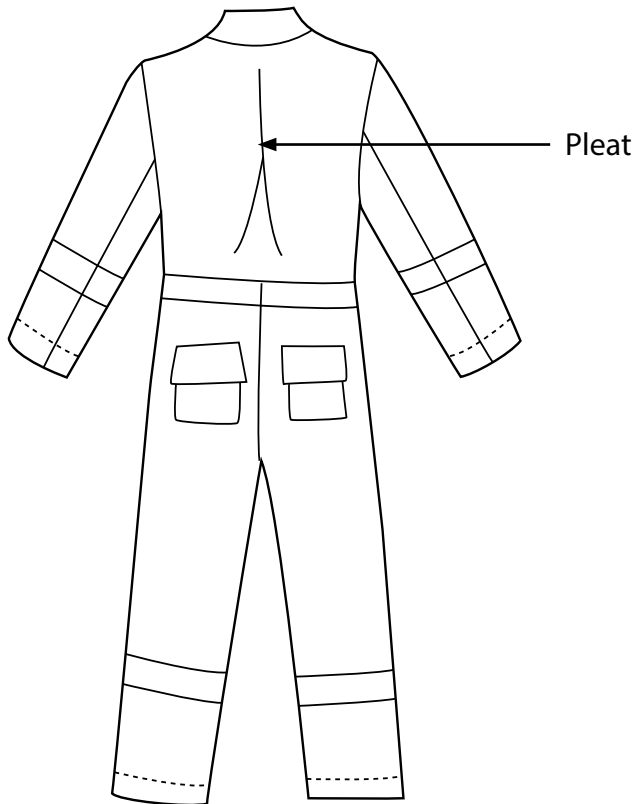


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13 The diagrams below show protective clothing for a painter. It is mass produced and made from synthetic non-woven fabric.



Front view



Back view

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(a) The back of the garment has a pleat in it.

Name **two** different types of pleat.

(2)

1

2

(b) (i) Describe **one** characteristic of synthetic non-woven fabric that allows it to be made into suitable and inexpensive products for the **consumer** to buy.

(2)

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.....

.....

(ii) Describe **one other** characteristic of synthetic non-woven fabric that makes it a suitable and inexpensive material for the **manufacturer** of the protective clothing.

(2)

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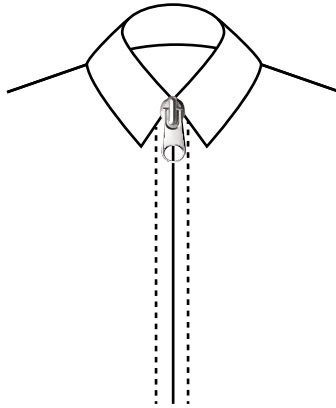
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(c) The front of the garment has a zip.

Outside view



Using notes and sketches, show how you would insert this zip. Include equipment and quality controls.

(4)

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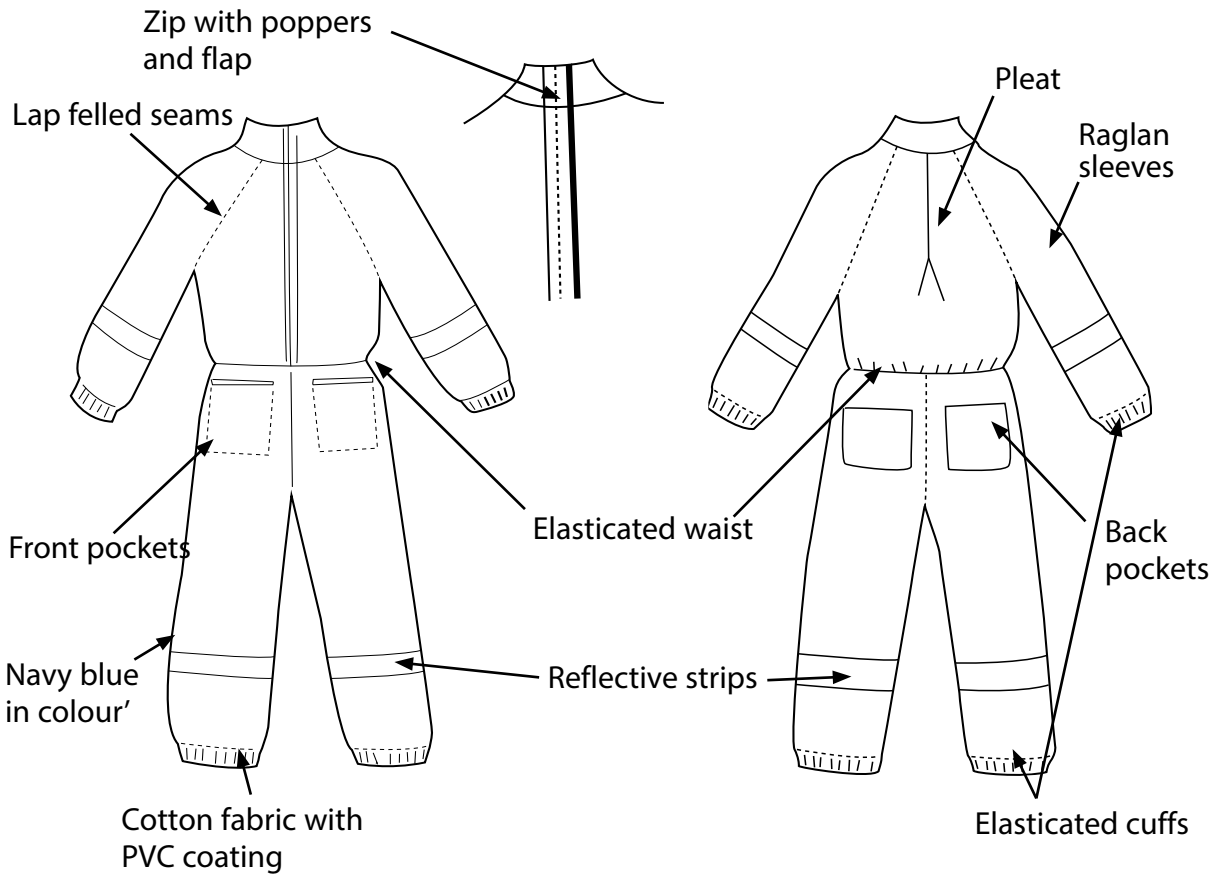
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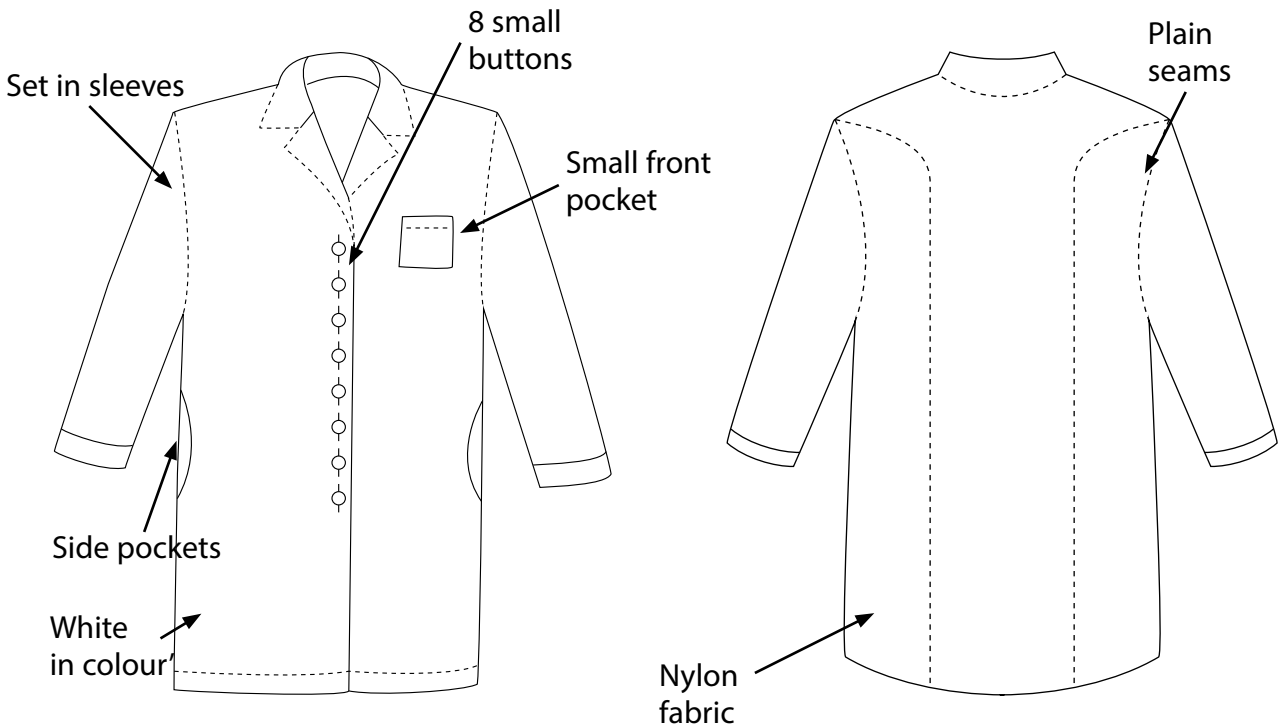
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*(d) The diagrams below show two different types of protective clothing for an interior and exterior painter.



Product A



Product B



Evaluate the suitability of **Product A** against **Product B**, with reference to function and user requirements.

(6)

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(Total for Question 13 = 16 marks)



14 (a) (i) Name **one** pile weave fabric.

(1)

(ii) Explain **one** disadvantage when manufacturing products using pile woven fabrics or finishes.

(2)

(b) (i) Give the names of **two** smart fabrics.

(2)

1

2

(ii) Explain the difference between modern and smart fabrics.

(2)

(c) Bleaching is one type of chemical finish used on fabric.

(i) Name **two other** chemical finishes.

(2)

1

2

(ii) Explain **one** advantage and **one** disadvantage of bleaching fabrics.

(4)

Advantage

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Disadvantage

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*(d) Discuss the advantages and disadvantages of using body scanners in textiles.

(6)

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(Total for Question 14 = 19 marks)

TOTAL FOR PAPER = 80 MARKS



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