

Surname	Centre Number	Candidate Number
Other Names		0



**GCSE – NEW**

3602U10-1



**FRIDAY, 24 MAY 2019 – AFTERNOON**

**DESIGN AND TECHNOLOGY  
UNIT 1  
FASHION AND TEXTILES**

2 hours

For Examiner's use only		
Question	Maximum Mark	Mark Awarded
1.	10	
2.	10	
3.	15	
4.	20	
5.	20	
6.	25	
<b>Total</b>	<b>100</b>	

**ADDITIONAL MATERIALS**

In addition to this examination paper, you will need a calculator.

**INSTRUCTIONS TO CANDIDATES**

Answer **all** questions.

Write your name, centre number and candidate number in spaces at the top of this page.

Write your answers in the spaces provided in this booklet. If you run out of space, use the continuation page at the back of the booklet, taking care to number the question(s) correctly.

Use black ink or black ball-point pen.

Do not use pencil or gel pen.

Do not use correction fluid.

**INFORMATION FOR CANDIDATES**

The number of marks is given in brackets at the end of each question or part question. You are advised to divide your time accordingly.

The total number of marks available is 100.

You are reminded of the need for good English and orderly, clear presentation in your answers. The quality of your written communication, including appropriate use of punctuation and grammar, will be assessed in your answer to question 4(c).

1. Many consumers prefer to buy fashion and textile products where environmental and ethical issues have been carefully considered during manufacture.

The hand-made children’s toy shown below was manufactured in Sri Lanka under the Fair Trade agreement.



**Product Information:**

- 100% hand woven cotton
- Plant based kapok filling

- (a) Explain how the choice of materials used to make the hand-made toy address some of the environmental concerns of consumers. [2]

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- (b) Explain how recycling materials could reduce the environmental impact of the toy. [3]

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- (c) (i) Place a **tick (✓)** in the box next to the correct Fair Trade mark. [1]



(ii) Explain how the Fair Trade Foundation supports workers in developing countries. [4]

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2. The beach bag shown below includes a flexible solar panel which allows the user to spend the day at the beach whilst keeping their electronic gadgets fully charged.



- (a) (i) Solar power is one form of renewable energy. State what is meant by the term 'renewable energy'. [1]

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- (ii) Explain how the solar panel on the beach bag works. [3]

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- (iii) Describe in detail **one** disadvantage to the user of the beach bag relying on solar power. [2]

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(b) Explain how technology-push has influenced the development of the solar beach bag. [4]

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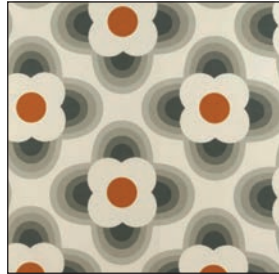
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3. The designer Orla Kiely is well-known for the use of print in her work which includes fashion products, accessories and interior design.

(a) Describe the difference between the process of printing a material and the process of dyeing a material. [2]



*Printed material*



*Dyed material*

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(b) One of Orla Kiely's most popular and iconic designs 'Stem' is shown below. She originally used gouache paint to present her ideas but has since turned to CAD to develop her patterns.



Explain why Orla Kiely would find using CAD a more effective method of developing her particular style of design. [6]

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- (c) Consumers are protected by law and have rights when purchasing products like the Orla Kiely train case shown below.



- (i) Place a **tick (✓)** in **three** of the boxes below to show which statements are true or false. 3 x [1]

<i>Statement</i>	<i>True</i>	<i>False</i>
The Consumer Rights Act protects consumers when buying products.		
The description must be fairly similar to the one described.		
The product must be fit for the intended purpose.		

- (ii) If the zip on the train case developed a fault and broke shortly after purchase, explain how the law would protect the consumer's rights. [4]

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4. The success of fashion and textiles products depends on the careful selection of materials used to manufacture the product.

(a) (i) Explain why the named material is the most suitable choice for **each** of the products pictured. 2 x [2]

**Knitted Cotton sleep suit**



**Woven Jute shopping bag**



<p><b>Named Material:</b> Cotton</p> <p>Explanation: .....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>	<p><b>Named Material:</b> Jute</p> <p>Explanation: .....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>
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(ii) Explain why the construction method used to make the material for **each** of the products pictured above is the most suitable. 2 x [2]

<p><b>Material construction:</b> Knitted</p> <p>Explanation: .....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>	<p><b>Material construction:</b> Plain weave</p> <p>Explanation: .....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>
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- (b) Anthropometric data would have been used to help develop the sleep suit and shopping bag. Explain why primary research would be used to gather this information. [2]

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- (c) The sleep suit is available in a range of sizes whilst the shopping bag is one size. Analyse the use of anthropometrics in developing both products. [10]

*Marks will be awarded for the content of the answer and the quality of written communication.*

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5. The girl pictured below is wearing a Bardot top, a very popular style from a ready to wear collection for one summer season.



- (a) (i) Place a **tick (✓)** in **one** box below to indicate the most suitable scale of production for the seasonal top. [1]

One-off Production	
Batch Production	

- (ii) Describe **one** advantage and **one** disadvantage to the consumer of buying popular ready to wear fashionable clothing like the Bardot top shown above.

Advantage: .....

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[2]

Disadvantage: .....

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[2]

(b) The manufacturer followed pattern markings when laying out the templates on the material to make the Bardot top.

(i) Draw the symbol in the box below that represents the straight of grain instruction. [1]

Symbol:

(ii) Explain how you would follow the straight of grain instruction when laying out templates on material. [2]

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(iii) The pattern on the material used to make the Bardot top has a one-way directional print. Explain how this affects the way you cut out the material to make the top. [2]

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(c) The Bardot top has been made from a polyester and cotton fibre blend. Evaluate the benefits to the wearer of using the blended material to make the summer top. [5]

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(d) Elastic has been used in a number of places to shape the Bardot top as shown below.

Evaluate the use of elastic as a method of shaping the top outlining the benefits to the wearer. [5]



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6. The two prototype cushions covers shown form part of a new range of soft furnishings.

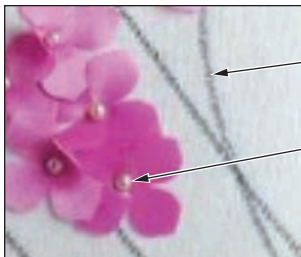
**Cushion Cover A**



**Cushion Cover B**



(a) (i) Label the picture below to show the correct machine stitch type and embellishment in the centre of the flowers which have been used on **Cushion Cover A**.



Stitch type: ..... [1]

Flower Centre: ..... [1]

(ii) The little flowers on **Cushion Cover A** have been made on the laser cutter. Give **three** reasons for using the laser cutter to make the flowers.

Reason 1: .....

[1]

Reason 2: .....

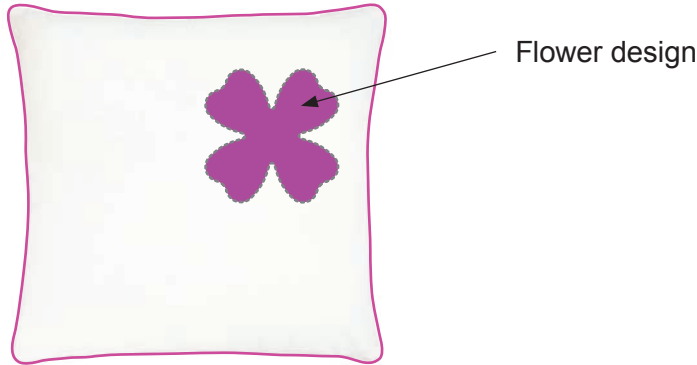
[1]

Reason 3: .....

[1]

- (iii) The designer wants to add a single pink flower design onto **Cushion Cover B** as shown.

Describe how to make a block and the process of block printing the flower. [4]



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- (iv) **Cushion Cover A** needs a piped edge the same as that seen on **Cushion Cover B**. Using notes and sketches explain how you would make a fabric covered piece of piping and insert it into the edge seam. [6]

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- (v) State the measurement for the standard seam allowance used in textiles and give a reason why it should be consistently applied when making the cushion covers.

Standard seam allowance: ..... [1]

Reason: .....

..... [1]

- (b) The cushion covers need a fastening in order to remove them from the inner cushion pad.

Describe **two** reasons for using an invisible zip, inserted into the side seam, to fasten the covers.

Reason 1: .....

..... [1]

Reason 2: .....

..... [1]

- (c) The materials that the cushion covers will be made from will need to be tested and finishes applied to ensure they are fit for purpose.

- (i) Name a finish that will prevent marks from permanently spoiling the cushion covers.

Finish: ..... [1]

- (ii) Describe a test that the designer could carry out to compare the shrinkage rates of materials in order to select the most suitable one for the cushion cover. [5]

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**END OF PAPER**

