

Design & Technology

A-Level

Textiles

Materials required for questions

- Pencil
- Rubber
- Calculator

Instructions

- Use black ink or ball-point pen
- Try answer all questions
- Use the space provided to answer questions
- Calculators can be used if necessary
- For the multiple choice questions, circle your answer

Advice

- Marks for each question are in brackets
- Read each question fully
- Try to answer every question
- Don't spend too much time on one question

Good luck!

Q1. Which of the following is not a natural fibre?

- A** Cotton
- B** Silk
- C** Nylon

Q2. Why do we blend fabrics?

- A** To improve properties
- B** To make aesthetic patterns
- C** To improve texture

Q3. What is the main disadvantage of silk?

- A** It has poor insulation properties
- B** Its expensive
- C** It weakens when wet

Q4. What are polyester fibres used to make?

- A** Seatbelts
- B** Ball gowns
- C** Lycra

Q5. Why is elastane (lycra) used in sportswear?

- A** Drapes well
- B** Good solvent resistance
- C** Its elastic

Q6. What is polycotton used to make?

- A** Shirts
- B** Car tyres
- C** Sportswear

Q7. What is not a synthetic fibre?

- A** Polyester
- B** Silk
- C** Elastane

Q8. What sort of degradation usually effects synthetic fibres?

- A** Heat radiation
- B** Infrared radiation
- C** UV radiation

Q9. The figure shows a dress



The dress is made from nylon.

Explain **one** working property of nylon that makes it suitable for the dress. **(3 marks)**

Q10. State **two** properties of natural fibres that make them suitable for clothing **(2 marks)**

Q11. Describe **two** features that make the figure suitable for mass production.
(4 marks)



Cotton
T - Shirt

Answers

Q1. C

Q2. A

Q3. B

Q4. A

Q5. C

Q6. A

Q7. B

Q8. C

Q9.

- Nylon is a durable fibre (1), which means it will withstand physical use without easily ripping (1), therefore it is good value for money as it will show less wear and tear/abrasion (1).
- • Nylon is non-absorbent/water resistant (1), which means it will not hold water and add to the weight of the dress/will dry quickly when washed (1), therefore making it easier to care for when laundering (1).

Q10.

- Thermal properties
- absorbency for dyeing
- soft handle
- good drape
- can be washed and ironed

Q11.

- Cotton is a natural material that is readily available in large quantities.
- Products can be nested together on large sheets of cotton to minimise waste.
- Automated machines can cut patterns in material to ensure repeatability and consistency.
- Several layers of cotton can be cut at the same time.
- Simple design ensures costs are kept to a minimum.
- Screen printing allows T shirts to be printed on and then the same design to be