

Design & Technology

Edexcel GCSE

Culture

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 term means the latest trends in clothing or decoration?

- A** Culture
- B** Fashion
- C** Faith

Q2. What is meant by "trend forecasting"?

- A** Predicting the styles, colours and materials that will be popular in the future
- B** Recording how many products were sold last year
- C** Copying a competitor's best-selling product

Q3. Which of the following is the best example of technology push?

- A** A company makes a bigger lunchbox because customers asked for one
- B** A company uses new wireless technology to create earbuds with no cables
- C** A shop lowers its prices to sell more products

Q4. In parts of Asia, the colour white is often associated with

- A** luck
- B** mourning
- C** danger

Q5. Why might a designer avoid using gelatine in a product sold around the world?

- A** It is too expensive to buy in large quantities
- B** It cannot be recycled
- C** It is made from pigs, so is avoided by some faiths such as Islam and Judaism

Q6. What is the purpose of "Sabbath mode" on an oven?

- A** It lets the oven run without being switched on during the Sabbath
- B** It makes the oven cook food faster
- C** It turns the oven off at night to save energy

Q7. Electric scooter and bike hire schemes are increasingly popular in cities. The scooters and bikes can be hired using a smartphone app.

Explain two social and/or cultural impacts that the introduction of an electric scooter or bike hire scheme could have. **(4 marks)**

1

2

Q8. The designer of a pair of sunglasses has been influenced by fashion and trends.

Discuss the importance of considering fashion and trends when designing products.

To support your answer refer to products that you are familiar with.

(8 marks)

[illegible]

Q9. A bicycle frame is made from titanium. The bicycle is manufactured in the United States of America and sold around the world.

The table below shows some additional information about the bicycle.

Source of titanium	China
Country of manufacture	United States of America
Potential market	Families, cycle clubs and bike hire shops
Scale of production	Mass

Analyse the information above.

Evaluate the bicycle with reference to social factors including:

- use for different social groups
- trends/fashion
- popularity.

(9 marks)

Answers

Q1. B

Q2. A

Q3. B

Q4. B

Q5. C

Q6. A

Q7.

Up to two marks for each explanation, two required (4 marks). Responses must relate to social and cultural impacts rather than sustainability issues; max 1 mark for being environmentally friendly unless it relates to social aspects.

Impacts can be positive or negative. Possible points include:

- It could reduce traffic and car use for short journeys (1), reducing the cost of travel for users as it is cheaper than petrol in cars (1)
- It could be dangerous to pedestrians/users (1) if used on paths and pavements/on roads with cars and traffic (1)
- It could improve the health and wellbeing of users (1) as they will be outside more (1)
- Increase in theft or vandalism (1) as scooters are left outside when not in use (1)
- The use of an app to hire (1) may exclude people without smartphones from hiring (1)
- Charge may not be sufficient (1) meaning journeys cannot be completed fully (1)

Award credit for other appropriate responses.

Q8.

Discussion about the importance of considering fashion and trends when designing products may include:

- How fashion and trends increase appeal to consumers through functionality or aesthetic desires
- How historical trends/fashions may impact future trends
- How fashion forecasters and trend predictions can predict future fashions
- How new technologies can create technology push and this can lead to market pull
- How marketing and social media can influence buyers and create trends
- Recent trends, e.g. sportswear being worn in daily life, eco and ethical design becoming popular
- Colour, shape and style influencing aesthetics
- Materials and the use of new and modern materials
- Styles that companies adopt, materials they use, and distinctive branding and logos; how a company can become fashionable or trendy with groups of consumers, e.g. Apple, Nike, New Balance

Examples used could relate to consumer products and cover areas that have influenced popularity, such as materials, technologies and colours. Award credit for any other appropriate response.

Level	Marks	Descriptor
0	0	No response or no response worthy of credit.
1	1-2	A basic answer showing limited knowledge or understanding of fashion and trends and changing consumer needs. There is no attempt at evaluation. The information is basic, communicated in an unstructured way and supported by limited evidence.
2	3-5	Some knowledge of fashion, trends and changing consumer needs. A basic attempt to discuss/evaluate why fashion and trends are important; any evaluation will be one-sided or limited in depth. There is a line of reasoning with some structure, mostly relevant and supported by some examples.

3	6-8	Excellent knowledge and understanding of fashion and trends and how this helps companies keep up with changing consumer needs, discussed convincingly using examples of products to analyse and/or evaluate. A well-developed, clear and logically structured line of reasoning, substantiated with examples.
---	-----	---

Q9.

Candidates might refer to some/all of the following in their response, but should be rewarded for other pertinent contextualised answers:

- Bicycles are a very common mode of transport in Europe and Asia
- Bicycle design has evolved for different markets and some are now assisted with electric motors so that they can be used by people who would not be able to ride a normal bicycle
- Bicycles can be bought/hired from shops all around the world
- Bicycles are often given to children as toys/for exercise, meaning that there is a continually growing market
- Bicycles are available in a wide range of sizes and shapes to suit a wide range of users from children through to adults, and different uses such as deliveries
- Some bicycles are designed for sports use and have advanced features to allow them to move faster
- Some nations actively promote the use of bicycles as a mode of transport/to improve their environmental credentials
- With increasing traffic congestion in towns and cities, bicycles are seen as a viable alternative to allow people to travel to school/work/for leisure/make deliveries
- Bicycles are used in many countries as 'taxis' transporting people round congested city areas
- Bicycles can be adapted for use as an alternative power source to drive grinding wheels for sharpening knives, scissors etc.
- Large numbers of bicycles are required/used, hence the need for mass manufacture
- Trends/fashions/growing concerns around the transportation of materials, given the negative environmental impact of transporting the titanium from China to the USA

Level	Marks	Descriptor
0	0	No rewardable content.

1	1-3	Attempts to interrogate and deconstruct information but connections and logical chains of reasoning are flawed. An unbalanced appraisal of the information/issues, containing judgements that show a limited awareness of the interrelationships between factors or competing arguments. A conclusion may be presented but it is likely to be generic assertions rather than supported by relevant judgements.
2	4-6	Interrogates and deconstructs information and provides some connections and logical chains of reasoning. A balanced appraisal of the information/issues, containing judgements that show an awareness of the interrelationships between factors or competing arguments. A conclusion is presented that is partially supported by relevant judgements.
3	7-9	Interrogates and deconstructs information and provides sustained connections and logical chains of reasoning. A well-balanced appraisal of the information/issues, containing judgements that show a thorough awareness of the interrelationships between factors or competing arguments. A conclusion is presented that is fully supported by relevant judgements.