

GENERAL STUDIES (SPECIFICATION A)
Unit 5 Science, Mathematics and Technology

GSA5

11 June 2003 Afternoon Session

You will require:

- an objective test answer sheet;
- a data booklet for Questions 1-25 (enclosed);
- an 8-page answer book;
- a black ball-point pen.

The Data Booklet is not reproduced here due to third-party copyright constraints.
Question 1 relied heavily on this and so has not been included.
The full copy of this paper can be obtained by ordering GSA5 from AQA Publications
Tel: 0161 953 1170

Time allowed: 1 hour 30 minutes

Instructions

- Use a black ball-point pen for recording your answers to Questions 1.1 to 1.25 on your objective test answer sheet.
- Use blue or black ink or ball-point pen for answering one question from Questions 2.1 to 2.6.
- Write the information required on the front of your answer book for Question 2. The Examining Body for this paper is AQA. The *Paper Reference* is GSA5.
- Answer **all of** Question 1 (1.1 to 1.25) using the answer sheet provided **and one** question from Questions 2.1 to 2.6 in a separate answer book.
- For each item in Question 1 there are several alternative responses. When you have selected the response which you think is the best answer to a question, mark this response on your answer sheet.
- Do all rough work in your answer book, **not** on your answer sheet.

Information

- This paper consists of **two** questions.
Question 1 contains 25 objective test questions based on a variety of exercises in spatial and mechanical relations. Each question carries 1 mark. No deductions will be made for wrong answers.
- **Question 2** consists of six alternative essay questions (2.1 to 2.6).
25 marks are allocated to each of Questions 2.1 to 2.6.

Advice

- Attempt Questions 1.1 to 1.25 before you do **one** from Questions 2.1 to 2.6.
- Spend approximately equal amounts of time on Questions 1 and 2 as a whole.
- Do not spend too long on any item in Question 1. If you have time at the end, go back and answer any question you missed out.
- Make sure that you hand in **both** your answer sheet **and** your essay answer book at the end of the examination.

QUESTION 2

Answer **ONE** of Questions 2.1 to 2.6.

Each question carries 25 marks.

This question must be answered in a separate answer book which must be clearly labelled GSA5 Question 2. Include relevant science wherever appropriate. Write as if you are addressing the intelligent general reader.

The assessment of your answer will take account not only of content but also your use of English, including spelling, punctuation, vocabulary, sentence construction and the organisation of your essay.

2.1 Discuss the ways in which science and technology may be used to address the United Kingdom's growing transport problems.

2.2 Computers with increasingly more technical hardware and software are being sold for use in the home.

Discuss the items that such a range may comprise and their potential application by a family.

2.3 Discuss the effectiveness of the design features used by supermarkets to assist customers and stimulate demand.

2.4 "There are three sorts of lies – lies, damned lies and statistics" (B Disraeli).

Comment on the validity of this statement and discuss with appropriate examples or illustrations the extent to which statistics may be used properly or improperly.

2.5 Explain the science which may be used by a successful gardener.

Discuss the benefits of a well planned and maintained garden.

2.6 What are the physical requirements of a bridge?

Discuss how such a structure may have different aesthetic and engineering qualities. Use examples to illustrate your answer.

END OF QUESTIONS