

General Certificate of Education  
June 2003  
Advanced Subsidiary Examination



**PSYCHOLOGY (SPECIFICATION B)**  
**Unit 1 Introducing Psychology**

**PYB1**

Monday 19 May 2003 Afternoon Session

**In addition to this paper you will require:**  
a 16-page answer book.  
You may use a calculator.

Time allowed: 1 hour 30 minutes

**Instructions**

- Use blue or black ink or ball-point pen.
- Write the information required on the front of your answer book. The *Examining Body* for this paper is AQA. The *Paper Reference* is PYB1.
- Answer **three** questions.
- Answer **one** question from **Section A**, the **compulsory** question in **Section B** and **one** question from **Section C**.
- Do all rough work in the answer book. Cross through any work you do not want marked.

**Information**

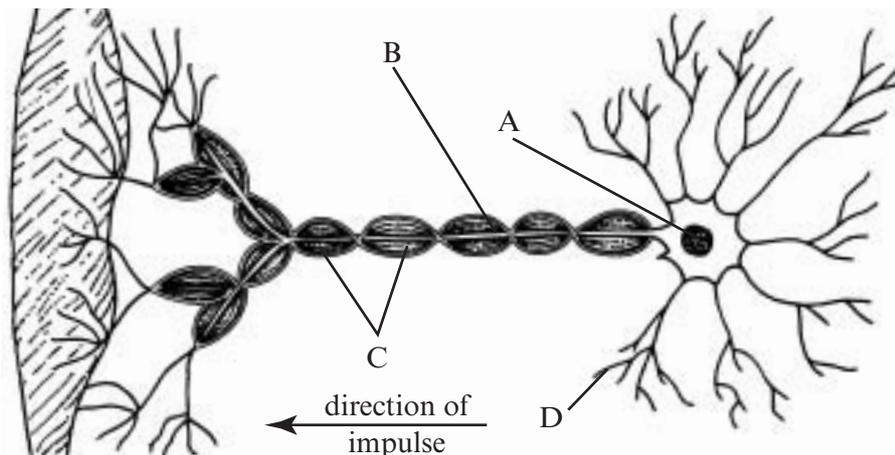
- The maximum mark for this paper is 60.
- Mark allocations are shown in brackets.
- Questions carrying 10 marks should be answered in continuous prose. Quality of written communication will be assessed in these answers.
- In answers to questions carrying 10 marks, you will be assessed on your ability to use an appropriate form and style of writing, to organise relevant information clearly and coherently, and to use specialist vocabulary, where appropriate. The degree of legibility of your handwriting and the level of accuracy of your spelling, punctuation and grammar will also be taken into account.

## SECTION A: APPROACHES

Answer **one** question from this Section.

Each question carries 20 marks.

- 1 (a) Outline **one** assumption of the cognitive approach in psychology. (2 marks)
- (b) Identify and explain **one** way in which Darwin's work has influenced the development of psychology. (3 marks)
- (c) Hannah has an illness which means that she must go to hospital once a month for drug treatment. The drugs which she is given always make her sick afterwards. She has been going to hospital for six months. Hannah now finds that when she arrives at the hospital for her treatment, she is sick before she has the drugs.
- With reference to the behaviourist approach in psychology, give **one** explanation as to why Hannah is now sick before she takes the drugs. (5 marks)
- (d) Describe and discuss **at least two** features of the humanistic approach to understanding human behaviour. (10 marks)
- 2 (a) Using an example, explain what is meant by *localisation of cortical function*. (3 marks)
- (b) Explain why twin studies are used by some psychologists to investigate the genetic basis of behaviour. (3 marks)
- (c) In your answer book, name the parts of the neuron labelled **A**, **B**, **C** and **D** in **Figure 1** below. Clearly identify your answers as **A**, **B**, **C** and **D**. (4 marks)



**Figure 1: The structure of a neuron**

*Source: DONALD PENNINGTON, *Introducing Psychology* (Hodder & Stoughton) 2002*

- (d) Gary gets very nervous on the day of his examination. In the morning he cannot eat. If he tries to read his notes, he finds that he cannot concentrate. Just before he goes into the examination room his hands become sticky as he begins to sweat. After the examination he feels hungry and sleepy.

Describe the function of the adrenal glands **and** autonomic nervous system (ANS) in stressful situations. Use this knowledge to explain **each** of Gary's symptoms **before and** after the examination. *(10 marks)*

**TURN OVER FOR THE NEXT SECTION**

**Turn over ►**

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**SECTION B: RESEARCH METHODS**

This question is to be answered by **all** candidates.

This question carries 20 marks.

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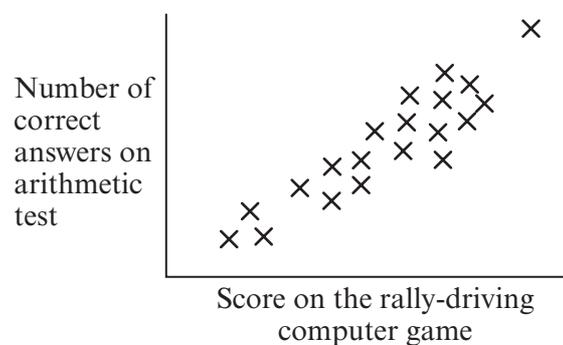
- 3 A psychologist wanted to investigate the relationship between mathematical ability and the driving skill of sixth form students.

The psychologist took a random sample of twenty students from the population of sixth form students enrolled in a school.

He used a mental arithmetic test to measure mathematical ability and a rally-driving computer game to measure driving skills.

For each student, the psychologist recorded the number of correct answers on the mental arithmetic test and the score on the rally-driving computer game.

- (a) State a null hypothesis for this study. (2 marks)
- (b) (i) What is meant by the term *random sampling*? (2 marks)
- (ii) Give **one** advantage and **one** disadvantage of random sampling. (2 marks)
- (c) State which of the following methods of investigation the psychologist used in this study:
- observation;
  - experiment;
  - correlation. (1 mark)
- (d) Explain **one** difference between an experiment and a correlation study. (4 marks)
- (e) After the tests had been completed, the psychologist plotted the results on a scattergram, which is given in **Figure 2** below.



**Figure 2**

- In your answer book, give an appropriate title for the scattergram. (2 marks)

- (f) What does the scattergram suggest about the relationship between the two abilities tested by the psychologist? (2 marks)
- (g) Identify and outline **one** ethical issue which the psychologist should have considered in this study. (2 marks)
- (h) The psychologist decided to carry out a case study of a student who scored very highly on the rally-driving computer game.
- (i) What is meant by a *case study*? (1 mark)
- (ii) Give **one** strength and **one** weakness of case studies. (2 marks)

**TURN OVER FOR THE NEXT SECTION**

**Turn over ►**

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**SECTION C: PSYCHOLOGY OF GENDER**

Answer **one** question from this Section.

Each question carries 20 marks.

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- 4 (a) Using an example, outline what is meant by *cross-cultural research* in relation to gender. (3 marks)
- (b) Explain the difference between *nature* and *nurture* in relation to gender. (3 marks)
- (c) A primary school teacher asked her pupils to write a short story about themselves and what they wanted to do in the future.

One girl wrote, “My name is Tanya and I am a girl. I like to help my mummy with the cooking. When I grow up I am going to have two children and stay at home and cook meals for them.”

Outline what is meant by the terms *identity* and *role*. With reference to the girl’s story, give an example of gender identity and a gender role. (4 marks)

- (d) Describe and discuss **two** problems which might arise when psychologists use observation to investigate gender differences in behaviour. Refer to **at least one** study to support your answer. (10 marks)
- 5 (a) What do social learning theorists mean by the term *modelling*? (2 marks)
- (b) Identify and describe **one** feature of Kohlberg’s theory of the development of gender concept. (3 marks)
- (c) Jamie is a four-year-old boy. Unlike his older brother, he has always been very passive and his language development is very slow. His mother was concerned about his poor speech and took him to the doctor. After a number of tests she has been told that Jamie has an atypical pattern on the 23<sup>rd</sup> chromosome pair – XXY.
- State how Jamie’s chromosome pattern differs from that of most boys, and explain why psychologists who study gender might be interested in children like Jamie. (5 marks)
- (d) Describe and discuss the psychoanalytic approach to explaining gender identity. (10 marks)

**END OF QUESTIONS**