

General Certificate of Education
January 2005
Advanced Subsidiary Examination



PSYCHOLOGY (SPECIFICATION B)
Unit 1 Introducing Psychology

PYB1

Tuesday 11 January 2005 Morning Session

In addition to this paper you will require:
a 12-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) Explain **one** way in which Darwin influenced the development of psychology. (3 marks)
- (b) The table below is not complete. It should contain the names of key approaches in psychology and a basic assumption of each approach. In your answer book, identify the key approaches for (i) and (ii), and give a basic assumption for the cognitive approach in (iii). Label your answers clearly. (3 marks)

Key Approach	Basic Assumption
(i)	Individuals strive towards self-actualisation.
(ii)	The object of study for scientific psychology is behaviour.
Cognitive	(iii)

- (c) Shelby had a new set of crayons. However, rather than use them in her colouring book, she scribbled all over the wallpaper. Shelby's mother was very angry and sent her to her bedroom. When Shelby was left alone again, she crayoned in her book, rather than on the wallpaper.

Identify **two** features of the behaviourist approach and say how they might explain Shelby's change in behaviour. (4 marks)

- (d) Discuss **at least two** ways in which Freud influenced the development of psychology. (10 marks)

- 2 (a) Identify **two** functions of the parasympathetic branch of the autonomic nervous system. *(2 marks)*
- (b) The table below is not complete. In your answer book, write the names of the cortical areas of the brain that should be placed in (i) and (ii). For (iii), describe the main function of the visual area. Label your answers clearly. *(3 marks)*

Cortical Area of the Brain	Main Function
(i)	Involved in regulating and producing voluntary movements such as the fine movements of the limbs
(ii)	Receives information about touch, temperature and pain
Visual area	(iii)

- (c) Explain how selective breeding studies can be used to find out about the genetic basis of behaviour. *(5 marks)*
- (d) Discuss **at least two** methods that have been used to investigate cortical specialisation in the brain. *(10 marks)*

TURN OVER FOR THE NEXT SECTION

Turn over ►

SECTION B: RESEARCH METHODS

Answer all parts of the compulsory question in this Section.

This question carries 20 marks.

- 3 A psychologist conducted an experiment to investigate whether sleep deprivation disrupts participants' problem solving.

A stratified sample of twenty participants was selected to take part in the study.

In the experiment, participants were presented with six different mathematical problems.

In one condition, ten participants were each required to solve six problems, having been deprived of sleep for twenty-four hours prior to the study.

In the control condition, the remaining ten participants, who had not been deprived of sleep, were each required to solve the same problems.

Participants were allowed five minutes to solve each problem.

The total number of mathematical problems solved by each participant is given in **Table 1**.

Participant	Number of mathematical problems solved Sleep-deprivation condition	Participant	Number of mathematical problems solved Control condition
1	2	11	4
2	1	12	5
3	3	13	3
4	4	14	6
5	3	15	5
6	2	16	3
7	2	17	4
8	1	18	6
9	1	19	6
10	1	20	6
Total	20		48

Table 1 The total number of mathematical problems solved by each participant in the sleep-deprivation condition and control condition

- (a) Using the values given in **Table 1**,
- (i) calculate the mean score for the sleep-deprivation condition **and** for the control condition;
 - (ii) give the mode for the sleep-deprivation condition **and** for the control condition.
- Label your answers clearly. (4 marks)
- (b) What do the total scores indicate about the effects of sleep deprivation? Justify your answer. (2 marks)
- (c) Prior to the experiment, the psychologist conducted a pilot study. Outline why the psychologist conducted a pilot study. (2 marks)
- (d) Explain **one** problem that might have arisen if the psychologist had chosen to use a repeated measures design in **this** study. (3 marks)
- (e) (i) The psychologist used stratified sampling to select the twenty participants.
- Outline what is meant by *stratified sampling*. (2 marks)
- (ii) Identify **one** strength and **one** limitation of stratified sampling. (2 marks)
- (f) Identify and explain **one** ethical issue that the psychologist should have taken into account in **this** study. (3 marks)
- (g) Identify **one** strength and **one** limitation of the experimental method in psychology. (2 marks)

TURN OVER FOR THE NEXT SECTION

Turn over ►

SECTION C: PSYCHOLOGY OF GENDER

Answer **one** question from this Section.

Each question carries 20 marks.

- 4 (a) Outline what is meant by the term *content analysis*. (2 marks)
- (b) Outline **one** strength and **one** limitation of using cross-cultural research to investigate gender differences. (4 marks)

- (c) Jason received a model train set for his fifth birthday.

His sister, Lisa, said, "When I grow up, I want to be a train driver."

Jason replied, "No, you can't. Girls don't drive trains."

Explain what is meant by a *sex-role stereotype*. Refer to Jason and Lisa's conversation in your answer. (4 marks)

- (d) Discuss **at least two** issues which might arise when using the experimental method to investigate gender differences. Refer to **at least one** study in your answer. (10 marks)

- 5 (a) Below are statements made by three children.

- "My name is Michael. I have long, brown hair."
- "My name is Valerie. When I grow up, I am going to be a mummy."
- "My name is Kate and I am a girl."

In your answer book, write down the statement which illustrates the concept of

- (i) gender identity;
- (ii) gender stability. (2 marks)
- (b) Identify **one** atypical sex chromosome pattern and outline how it might affect an individual. (3 marks)
- (c) Describe **one** study in which the development of gender identity was investigated. Indicate in your answer why the study was conducted, the method used, the results obtained and the conclusion drawn. (5 marks)
- (d) Discuss the social learning theory explanation of gender. (10 marks)

END OF QUESTIONS

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