



**GCE A level**

1333/01

**PSYCHOLOGY**

**UNIT PY3**

**PSYCHOLOGY: RESEARCH METHODS  
AND ISSUES IN RESEARCH**

P.M. FRIDAY, 17 June 2011

1½ hours

**ADDITIONAL MATERIALS**

In addition to this examination paper, you will need a 12 page answer book.

**INSTRUCTIONS TO CANDIDATES**

Use black ink or black ball-point pen.

Answer **all** questions in Section A and Section B and **two** questions in Section C.

Write your answers in the separate answer book provided.

**INFORMATION FOR CANDIDATES**

The number of marks is given in brackets at the end of each question.

Note the information given at the start of every section.

## Section A

1.

Total Marks 24

Read the following material and answer **ALL** the questions that follow.  
You are advised to spend at least 5 minutes reading the information provided.

A non-participant observation was carried out during a 1 hour play session at a local nursery. Twelve children (6 boys and 6 girls) aged between 3 and 4 were observed. The observation took place on a Monday morning. The observer was interested in the type of toys with which boys and girls play. Before the study took place the toys were classed as being either action or non-action toys. The toys with which the children played were noted by the observer.

**Action Toys**

Action-man  
Cars  
Train  
Toy soldiers

**Non-action Toys**

Teddy bear  
Jigsaw  
Colouring equipment  
Reading books

Gender	Action	Non-action
boys	142	7
girls	21	181

- (a) (i) Define what is meant by the term ‘non-participant observation’. [2]
- (ii) Give **one** advantage and **one** disadvantage of non-participant observation. [4]
- (b) (i) Define what is meant by the term ‘operationalisation of a variable’. [2]
- (ii) Explain how the category ‘action toys’ may have been operationalised in the above study. [2]
- (c) Explain **one** issue of reliability that may have arisen in the above study. [2]
- (d) (i) A non-participant observation can also produce qualitative data. Define the term ‘qualitative data.’ [2]
- (ii) Give **one** advantage of qualitative data. [2]
- (iii) Give **one** disadvantage of qualitative data. [2]
- (e) The above findings led to a laboratory experiment being carried out to investigate if ‘gender affects toys chosen by a child’. Children were taken into a laboratory and given the option of choosing an ‘action toy’ or a ‘non action’ toy.
- (i) In this laboratory experiment the IV was gender. What is meant by the term IV? [2]
- (ii) In this laboratory experiment the DV was the toy chosen. What is meant by the term DV? [2]
- (iii) The findings from this laboratory experiment supported the null hypothesis. Write an appropriate null hypothesis for this laboratory experiment. [2]

## Section B

2.

Total Marks 26

*Read the following material and answer **ALL** the questions that follow.  
You are advised to spend at least 5 minutes reading the information provided.*

A natural experiment was carried out in a factory to test if ‘weather affects people’s mood’. Twenty employees were chosen by systematic sampling. They were asked to fill in a questionnaire. A scale was used to measure mood. A high score (5) indicated a ‘happy’ mood and a low score (1) indicated an ‘unhappy’ mood.

The same participants filled the questionnaire in twice: once when the sun was shining brightly and once when it was raining heavily.

1	2	3	4	5
Unhappy	Slightly unhappy	Neither happy nor unhappy	Slightly happy	Happy

- (a) Define what is meant by the term ‘natural experiment’. [2]
- (b) Explain **one** advantage and **one** disadvantage of a natural experiment. [4]
- (c) Identify the independent variable (IV) and the dependent variable (DV) in the above study. [2]
- (d) (i) Define what is meant by the term ‘systematic sample’. [2]
- (ii) Explain how a systematic sample could have been used to select participants in this research. [2]
- (e) (i) Describe what is meant by the term ‘confounding variable’. [2]
- (ii) Explain **two** confounding variables that may have affected the above study. [4]
- (f) (i) Define what is meant by the term ‘non-directional hypothesis’. [2]
- (ii) State **one** appropriate directional hypothesis for the above study. [2]
- (g) (i) Define what is meant by the term ‘nominal level data’. [2]
- (ii) Explain **one** advantage of this type of data. [2]

**Section C**

*Answer **two** of the following questions.*

3. Discuss ethical issues in the use of non-human participants in research in psychology. [15]
4. Consider ethical issues arising from two applications of psychology in the real world. [15]
5. Discuss the disadvantages of the use of the scientific method in psychology. [15]