



GCE A level

1333/01

**PSYCHOLOGY – UNIT PY3
PSYCHOLOGY: RESEARCH METHODS
AND ISSUES IN RESEARCH**

A.M. MONDAY, 11 June 2012

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 from Section C.

Write your answer 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.

You are reminded that assessment will take into account the quality of written communication used in answers that involve extended writing (Section C).

SECTION A

*Read the following material and answer **all** the questions that follow.*

You are advised to spend at least 5 minutes reading the information provided.

Question 1

A correlation was carried out to see if there is a relationship between psychological distress and incidence of coronary heart disease (CHD). Using systematic sampling 100 government workers were selected as participants. Psychological distress scores were measured at the beginning using a government health questionnaire. Incidents of CHD were recorded over the next seven years. These scores were correlated and a correlation coefficient of +0.78 was found.

- (a) (i) Define what is meant by the term 'correlation'. [2]
- (ii) Explain **one** advantage and **one** disadvantage of using a correlation. [4]
- (b) (i) What is meant by 'correlation coefficient of +0.78' in this study? [2]
- (ii) Write an appropriate hypothesis for this study. [2]
- (c) Define what is meant by the term 'co-variables'. [2]
- (d) Identify the statistical test that was used to analyse the data in the above study and explain one reason why this test is chosen. [2]
- (e) (i) A correlation can produce quantitative data. Describe the term 'quantitative data'. [2]
- (ii) Explain **one** advantage of quantitative data. [2]
- (iii) Explain **one** disadvantage of quantitative data. [2]
- (f) (i) Define what is meant by the term 'reliability'. [2]
- (ii) Define what is meant by the term 'validity'. [2]
- (g) Explain how concurrent validity could be used to ensure validity in research. [2]

Total Marks 26

SECTION B

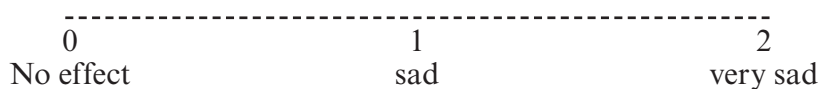
Read the following material and answer **all** the questions that follow.

You are advised to spend at least 5 minutes reading the information provided.

Question 2

Research has found that negative thoughts cause depression. A questionnaire was designed in order to measure negative thoughts which could then be used as a predictor of depression. The questionnaire was given to forty university students who were chosen randomly. The questionnaire contained ten negative statements. The participants were told to read each statement and then rate on a three point scale how the statements made them feel.

E.g. your best friend is having a party but has not invited you, how do you feel?



The participants all filled in the questionnaire while in the university canteen at 12am on a Monday.

- (a) Explain **one** advantage and **one** disadvantage of using a questionnaire. [4]
- (b) Identify and explain how **one** confounding variable may have affected the above study. [2]
- (c) (i) Define what is meant by the term ‘random sample’. [2]
(ii) Explain **two** disadvantages of using a random sample to select participants in research. [4]
- (d) What is meant by the term ‘confidentiality’ in psychological research? [2]
- (e) The research from this study led to a laboratory experiment to test the hypothesis: ‘gender affects negative thoughts’. The researcher used an independent groups design.
(i) Define what is meant by the term ‘laboratory experiment’. [2]
(ii) Define what is meant by the term ‘independent groups design’. [2]
(iii) State an appropriate directional hypothesis for the laboratory experiment described in (e). [2]
- (f) (i) Define what is meant by the term ‘ordinal level data’. [2]
(ii) Explain **one** advantage of ordinal level data. [2]

Total Marks 24

Turn over.

SECTION C

Answer two of the following questions.

3. Consider ethical issues in the use of human participants in research in psychology. [15]
4. Explain 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]