



GCE AS – NEW

B290U20-1



S17-B290U20-1



PSYCHOLOGY – AS component 2
Psychology: Investigating Behaviour

MONDAY, 22 May 2017 – AFTERNOON

1 hour 45 minutes

ADDITIONAL MATERIALS

In addition to this examination paper, you will need a WJEC pink 16-page answer booklet.
You may require a calculator and a ruler.

INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen.
Answer **all** questions in **Sections A and B**.
Write your answers in the separate answer booklet provided.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets at the end of each question or part-question.
You are reminded of the necessity for good English and orderly, clear presentation in your answers.
Assessment will take into account the quality of written communication used in your answers.

Section A

Answer all questions

1. Explain **one** difference between participant and non-participant observations. [2]

2. Describe the format for reporting psychological investigations. [6]

3. Identify what is being described in the following statements:
 - (a) A type of sampling where one participant recruits other participants to take part in the research. [1]
 - (b) The most basic level of measurement. [1]
 - (c) A graphical representation that displays the frequency of continuous data. [1]
 - (d) An inferential statistical test that can be used when a researcher is looking to investigate a possible difference when using a repeated measures experimental design and the data is at least an ordinal level of measurement. [1]

4. Describe the methodology **and** sample used by Kohlberg (1968) in his research '*The child as a moral philosopher*'. [8]

5. Evaluate Kohlberg's (1968) research '*The child as a moral philosopher*'. [10]

Section B

Answer all questions

6. A professor chose to investigate the following hypothesis: '*There will be a difference in the attractiveness ratings of men when they wear aftershave and when they don't wear aftershave*'. The professor conducted his research at a bar. The researcher invited 40 of his female students to attend the event in order to celebrate his 50th birthday.

20 female students were randomly allocated to attend the event at 18:30 and the remaining 20 female students were asked to arrive at 20:00. 25 male students (who were paid by the professor) socialised with the first group of female students, wearing no aftershave. After one hour the first group of female students left. The male students then applied aftershave and socialised with the second group of female students.

As they were leaving, female students were asked to give some feedback using a questionnaire. One of the questions was:

7. Using the following scale, rate the attractiveness of the male students you met at the event.

0 – Not attractive at all

1 – Weak levels of attraction

2 – Reasonably attractive

3 – Very attractive

Your rating: _____

The University professor found that the mean 'attractiveness' rating for the male students when they did not wear aftershave was 1.8, whereas the mean 'attractiveness' rating for the male students when they wore aftershave was 2.1.

- (a) Describe **one** way the professor behaved unethically when conducting this research. [2]
- (b) State a suitable null hypothesis for this research. [2]
- (c) Briefly explain **one** strength and **one** weakness of the professor conducting his research in the field. [2+2]
- (d) Briefly explain **one** strength and **one** weakness of using the mean score in this research. [2+2]
- (e) The professor used a Mann-Whitney U test. Justify why this test is appropriate for analysing the data collected in his research. [4]

- (f) Using the critical values table below, select a suitable critical value that the professor should use in his analysis and explain your selection. [2]

Table of Critical Values of U ($p=0.05$), for a two-tailed test

		N_1		
		18	19	20
N_2	18	99	106	112
	19	106	113	119
	20	112	119	127

The observed (calculated) value must be equal to or less than the critical value in this table for the result to be significant at the given level.

- (g) The professor found the calculated (observed value) was 123. Explain if the professor should accept or reject his null hypothesis. [2]

7. A positive psychologist wanted to investigate if happiness increased in relation to annual income. She decided to collect the data using a questionnaire that she posted on-line. She collected information about the participants using questions such as:

9.	In £, estimate your total annual income.	£
10.	In £, estimate your total annual outgoings.	£

The psychologist then asked all of the participants to answer questions that measured their happiness level. The psychologist decided to correlate the total score obtained from the happiness questions with the participant's total annual income.

- (a) Briefly explain **one** issue of internal reliability that may arise in this research. [2]
- (b) Would question 9 in the on-line questionnaire (noted above) produce qualitative data? [1]
- (c) Identify **one** method of graphical representation that could be used by the psychologist to display the data relating income to happiness level. [1]
- (d) (i) Identify an inferential statistical test that could be used to analyse if there is a correlation between income and happiness scores of the participants. [1]
- (ii) Explain **two** reasons why your choice of test for this research is appropriate. [2+2]
- (e) (i) A colleague of the psychologist was concerned about the ethics of this research, most notably the possible risk to the participants' values, beliefs, relationships, status or privacy. Explain why this ethical issue might be relevant to this research. [3]
- (ii) What advice could the colleague offer to deal with the risk to the participants' values, beliefs, relationships, status or privacy in this research. [3]

8. A developmental psychologist was concerned about the amount of time young people seem to spend using social media. She decided to conduct a semi-structured interview with a group of 10-14 year olds. She initially asked her 12 year old neighbour to participate. She then asked the neighbour to recruit two other participants. Each of these participants then also recruited another two participants each. By the end of the research the psychologist had conducted seven semi-structured interviews. One question the developmental psychologist asked each participant was '*How many hours have you spent using social media in the last week?*' The results for this question are displayed in the table below:

Participant number	1	2	3	4	5	6	7
Number of hours spent using social media in the last week.	14	10	15	35	14	15	13

- (a) Briefly explain **one** strength and **one** weakness of using a semi-structured interview in this research. [2+2]
- (b) Suggest **one** question that could be used in this interview that could produce qualitative data. [2]
- (c) Explain why the question "*How many hours have you spent using social media in the last week?*" should produce quantitative data. [2]
- (d) Explain why the mean may not be an appropriate measure of central tendency for describing the number of hours spent using social media in the last week. [3]
- (e) Identify the sampling technique used by the developmental psychologist in this research. [1]
- (f) The psychologist decided that she wanted to complete a case study with one of the 10-14 year olds. Explain how the psychologist could complete this case study. [3]

END OF PAPER

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