# GCE A LEVEL

A290U20-1

S18-A290U20-1

# PSYCHOLOGY – A level component 2
## Psychology: Investigating Behaviour

FRIDAY, 8 JUNE 2018 – MORNING

2 hours 15 minutes

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**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.
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.

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## SECTION A – Principles of Research

*Answer* **all** *questions.*

**1.** Define the term 'target population'. [1]

**2.** Explain **two** weaknesses of conducting research on-line. [3+3]

**3.** Sketch the following distribution curves:

*(a)* Normal distribution [1]

*(b)* Positive skew [1]

*(c)* Negative skew [1]

**4.** *(a)* Describe how brain scans have been used in psychology. [6]

*(b)* Discuss the strengths and weaknesses of using brain scans in psychology. [6]

**5.** Critically assess whether non-participant observations are more appropriate than participant observations in psychology. [6]

**6.** *(a)* Evaluate the methodology used by Kohlberg (1968) in his research *'The child as a moral philosopher'*. [6]

*(b)* Evaluate the sample used by Kohlberg (1968) in his research *'The child as a moral philosopher'*. [6]

## SECTION B – Personal Investigations

*You should answer* **all** *the questions in this section with reference to the investigations carried out in your study of psychology.*

**INVESTIGATION ONE:** An experiment on the effect of context on an individual's perception.

**7.** *(a)* (i) Identify the experimental design used in your research and explain why this experimental design was the most appropriate for your research. [1+3]

(ii) Identify and fully justify the inferential statistical test that you used when analysing the data collected in your experiment. [4]

*(b)* Explain how you managed **two** ethical issues that arose in your research. [3+3]

*(c)* Suggest **two** ways in which your experiment could be improved. [6]

**INVESTIGATION TWO:** A correlational research-relationship between intelligence and another psychological variable (of the learner's choice).

**8.** *(a)* Identify the fully operationalised co-variable in your research other than intelligence. [2]

*(b)* With reference to your own correlational research, explain the way you dealt with reliability. [4]

*(c)* With reference to your own correlational research, explain how you dealt with validity. [4]



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## SECTION C – Application of research methods to a novel scenario

*Answer* **all** *questions.*

**9.** A Psychology teacher was concerned about the amount of stress her students were experiencing in preparation for their upcoming A level examinations. One month before the examination, she decided to offer her students the opportunity to learn how to meditate. 17 of her students decided to learn how to meditate and practiced meditation for at least 30 minutes per day. 15 of her students decided not to learn how to meditate. As they entered the exam room, she asked each student to rate their stress levels as either 'no stress', 'some stress' or 'very stressed'. The psychology teacher decided to compare the stress ratings of those students who meditated with those students who didn't meditate using a Chi-Square test.

**Table of stress ratings of those students who meditated compared with those students who didn't meditate.**

| | **No Stress** | **Some Stress** | **Very Stressed** |
|---|---|---|---|
| **Students who meditated** | 5 | 5 | 7 |
| **Students who did not meditate** | 2 | 3 | 10 |

*(a)* (i) Identify the sampling technique that was used in this research. [1]

(ii) Explain **one** advantage and **one** disadvantage of using this sampling technique in this research. [2+2]

*(b)* (i) Define the term 'social desirability'. [2]

(ii) Explain how social desirability might have influenced this research. [2]

*(c)* The psychology teacher analysed her results by using a Chi-Square test. Explain why this test was an appropriate inferential statistical test for this research. [4]

Following her initial research the Psychology teacher decided to collect some qualitative data from the students who meditated.

*(d)* (i) Identify **one** method that could be used to collect qualitative data about the experiences of the students who meditated. [1]

(ii) Justify why the choice of method you identified in *(d)*(i) would be appropriate in this research. [3]

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**10.** A researcher wanted to investigate if individuals who have a fear of flying (aerophobes) demonstrate lower levels of anxiety if they fly in First Class than if they fly in Economy Class. The researcher asked 12 participants who had just completed a 'Flying without Fear' course to take a short flight between London and Manchester in a First Class seat. The same 12 participants were then asked to take the return flight between Manchester and London in an Economy Class seat. After each flight, the participants were asked to self-report their ratings of anxiety, using the following scale: 0 = no anxiety to 10 = highest level of possible anxiety.

**Table of anxiety ratings**

| **Participant Number** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Anxiety rating after First Class flight** | *5* | *3* | *5* | *5* | *4* | *3* | *5* | *6* | *2* | *4* | *6* | *4* |
| **Anxiety rating after Economy Class flight** | *7* | *3* | *6* | *5* | *6* | *5* | *6* | *5* | *8* | *6* | *9* | *8* |

*(a)* Explain **one** disadvantage of using a self-report method to rate the anxiety of the participants in this research. [2]

*(b)* (i) Identify the experimental design used in this research. [1]

(ii) Explain **one** disadvantage of using this experimental design in this research. [2]

*(c)* (i) Showing your calculations, calculate the mean anxiety ratings of the 12 participants after the First Class flight. [2]

(ii) Give **one** advantage and **one** disadvantage of using the mean as a measure of central tendency in this research. [2+2]

*(d)* Explain why the ethical issue, 'risk of stress, anxiety, humiliation or pain', might be relevant to this research. [2]

**END OF PAPER**

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