



AS / A LEVEL PSYCHOLOGY

UNIT 2

Psychology: Using Psychological Concepts

SPECIMEN PAPER

1 hour 30 minutes

ADDITIONAL MATERIALS

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

INSTRUCTIONS TO CANDIDATES

Answer **all** the questions.

Use black ink or black ball-point pen.

Do not use pencil or gel pen.

Do not use correction fluid.

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 need for good English and orderly, clear presentation in your answers. Assessment will take into account the quality of written communication used in your answers.

No certificate will be awarded to a candidate detected in any unfair practice during the examination.

SECTION A – Contemporary Debate

1. 'Neuroscience has many positive applications in contemporary society; however the ethical implications are debatable'. Discuss. [20]

SECTION B – Principles of Research

Answer all questions.

2. Explain what is meant by 'social desirability'. [2]
3. Describe the findings and conclusions of Milgram's (1963) '*Behavioral study of obedience*'. [8]
4. Identify what is being described in the two following instances:
- (a) an experimental design where the same participants are used in all conditions; [1]
- (b) a statement which predicts there will be no difference between conditions in an investigation. [1]
5. Identify **two** ways to assess validity of a measuring tool. [2]
6. A psychologist was interested in whether drinking water during the school day would have an effect on children's cognitive performance. He was given permission by the head teacher of a local high school to carry out his investigation on 100 of the 15 year olds studying Mathematics GCSE. The students were put into pairs based on their gender (one boy and one girl) and their performance on a previous maths test. One from each pair was put into condition A; Condition A were each given a litre of bottled water to drink through the school day. The other person from the matched pair was assigned to condition B; Condition B received no bottle of water. During the last lesson of the day, all of the students were given the same maths test (maximum marks of 50) to determine how much they had learnt during that day's maths lesson. The results are shown in *Table 1* below:

Table 1: Summary table of scores in the maths test of students given water and not given water.

Score in the maths test (/ 50)	Number of students	
	Condition A (water given)	Condition B (no water given)
0 - 10	0	2
11 - 20	6	13
21 - 30	23	15
31 - 40	14	17
41 - 50	7	3
Total number	50	50

- (a) Identify a confounding variable in this study. [2]
- (b) Suggest a suitable directional hypothesis for this study. [2]
- (c) (i) Identify the experimental design used in this study. [1]
(ii) Explain **one** advantage of the experimental design used in this study. [3]
- (d) Draw a graph to represent the data in the table above. [6]
- (e) Analyse the ethical issues of this study. [8]

7. A psychologist conducted a questionnaire amongst first time mothers to investigate their experiences against their expectations. The psychologist advertised for first time mothers using posters displayed at 4 different hospitals around the UK. An extract from the advert can be seen below:

Are you a first time mum?

Would you be willing to take part in research about the experiences and expectations of first time mothers?

The research would require you completing two questionnaires; one questionnaire when you are 6 months pregnant and another questionnaire when your baby is 6 months old.

Your results will remain confidential. If you decide to participate you can still withdraw from the research at any time.

If you would like more information or would like to take part in the research, please contact

A.Researcher@wjec.ac.uk

The psychologist used the first 10 women to respond to her advert. She emailed the first questionnaire when the women were 6 months pregnant and then emailed the second questionnaire when the babies were 6 months old.

One of the questions included in both questionnaires was 'How satisfied are you with your life at present?' The women responded to this question on the scale, as shown below and the results are given in *Table 2*.

0	1	2	3
Not satisfied	Slightly satisfied	Mostly satisfied	Completely satisfied

Table 2. Responses to "How satisfied are you with your life at present?"

Woman's ID number	Satisfaction score	
	At 6 months pregnant	When baby 6 months old
1	3	3
2	2	3
3	1	3
4	3	1
5	2	3
6	3	3
7	0	0
8	3	3
9	2	3
10	3	2

- (a) Using the data from the table above:
- (i) Identify the modal scores for both questionnaires. It should be made clear which questionnaire the score relates to. [2]
 - (ii) The standard deviation for the 'At 6 months pregnant' condition was 1.2; calculate the standard deviation for the 'When baby was 6 months old' condition. You should show your calculations in full. [5]
- (b) During a peer review, a colleague noted that there were issues with the validity of this research.
- (i) Identify **two** issues of validity that might arise in this study. [4]
 - (ii) Discuss how both these issues of validity can be improved in this study. [4]
- (c) Explain an alternative way in which the participants could have been sampled in this research. [3]
- (d) The data collected by this researcher was primary data.
- (i) Give **one** advantage of using primary data in this research. [3]
 - (ii) Give **one** disadvantage of using primary data in this research. [3]

