GCE A LEVEL MARKING SCHEME

SUMMER 2025

A LEVEL
PSYCHOLOGY – COMPONENT 2
A290U20-1

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About this marking scheme

The purpose of this marking scheme is to provide teachers, learners, and other interested parties, with an understanding of the assessment criteria used to assess this specific assessment.

This marking scheme reflects the criteria by which this assessment was marked in a live series and was finalised following detailed discussion at an examiners' conference. A team of qualified examiners were trained specifically in the application of this marking scheme. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners. It may not be possible, or appropriate, to capture every variation that a candidate may present in their responses within this marking scheme. However, during the training conference, examiners were guided in using their professional judgement to credit alternative valid responses as instructed by the document, and through reviewing exemplar responses.

Without the benefit of participation in the examiners' conference, teachers, learners and other users, may have different views on certain matters of detail or interpretation. Therefore, it is strongly recommended that this marking scheme is used alongside other guidance, such as published exemplar materials or Guidance for Teaching. This marking scheme is final and will not be changed, unless in the event that a clear error is identified, as it reflects the criteria used to assess candidate responses during the live series.

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GCE A LEVEL PSYCHOLOGY – COMPONENT 2

SUMMER 2025 MARK SCHEME

Question	AO1	AO2	AO3	Total
1(a)(i)	2			**2**
1(b)	2			**2**
2(a)	1			**1**
2(b)	1			**1**
2(c)	2			**2**
3			6	**6**
4(a)	2			**2**
4(b)			4	**4**
5	2			**2**
6(a)	2			**2**
6(b)	2			**2**
7			6	**6**
8(a)	4			**4**
8(b)			5	**5**
8(c)			5	**5**
9(a)		2		**2**
9(b)		2		**2**
9(c)		4		**4**
9(d)		4		**4**
9(e)		3		**3**
10(a)(i)		2		**2**
10(a)(ii)		2		**2**
10(b)		3		**3**
10(c)(i)		1		**1**
10(c)(ii)		1		**1**
10(c)(iii)		2		**2**
10(d)		4		**4**
11(a)		2		**2**
11(b)		3		**3**
11(c)		3		**3**
12(a)		1		**1**
12(b)		4		**4**
12(c)(i)		2		**2**
12(c)(ii)		4		**4**
12(c)(iii)		1		**1**
12(d)			4	**4**
Total	**20**	**50**	**30**	**100**

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SECTION A – Principles of Research

Answer **all** questions.

1.(a)	**Explain what is meant by the term 'confounding variable'.**	**2**

Exemplar answers:

- A variable in a study that is not being measured or manipulated by the researcher, that affects SOME participants' behaviours but not others, having negative consequences for validity. [2 marks]
- A variable that has not been measured and will impact the findings. [1 mark]
- Any other appropriate content.

Marks	AO1
2	• Reasonable explanation.
1	• Basic explanation.
0	• Inappropriate answer given. • No response attempted.

1.(b)	**Explain what is meant by the term 'co-variables'.**	**2**

Exemplar answers:

- Co-variables indicate two or more quantities being measured in a correlation by the researcher that may or may not vary with each other. [2 marks]
- Two or more variables which are being measured in a correlation. [1 mark]
- Any other appropriate content.

Marks	AO1
2	• Reasonable explanation.
1	• Basic explanation.
0	• Inappropriate answer given. • No response attempted.

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2. (a)	**Using appropriate symbols, express the following: 'equal to'.**	1

Exemplar answers:

- = [1 mark]
- Any other appropriate content.

Marks	AO1
1	Accurate expression.
0	• Inappropriate answer given. • No response attempted.

2.(b)	**'greater than'.**	1

Exemplar answers:

- > [1mark]
- Any other appropriate content.

Marks	AO1
1	Accurate expression.
0	• Inappropriate answer given. • No response attempted.

2.(c)	**'probability of less than 10%'**	2

Exemplar answers:

- p<0.10 [2 marks]
- p<10% [1 mark]
- Probability < 0.10 [1 mark]
- P less than 0.10 [1 marks]
- Any other appropriate content.

Marks	AO1
2	• Fully accurate expression.
1	• Partially accurate expression.
0	• Inappropriate answer given. • No response attempted.

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3.	**Explain <u>two</u> advantages of using longitudinal research.**	6

Credit will be given for:

Advantages:

- Longitudinal studies control for 'participant variables', as the same person is tested on a number of occasions and compared and therefore acts as their own control.
- Cohort variables are not a problem.
- Reduces recall bias as participants are being researched as their life occurs, rather than research which may ask them to think back to experiences they may have had a long time ago.
- Helps us understand the order in which events may occur.
- Helps us establish links between early life circumstances and later outcomes.

- Any other appropriate content.

Marks	AO3
5 - 6	• Thorough evaluation. • Depth and range included. • Structure is logical.
3 - 4	• Reasonable evaluation. • Depth or range. • Structure is reasonable.
1 - 2	• Superficial evaluation. • Answer lacks structure.
0	• Inappropriate answer given. • No response attempted.

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4.(a)	**Describe how you would use a stratified sampling technique to select a sample of participants.**	**2**

Exemplar answers:

- The target group is divided into subgroups, e.g. by age, and then the participants are selected randomly from each subgroup. [2 marks]
- Participants are selected from subgroups. [1 mark]

- Any other appropriate content.

Marks	AO1
2	• Reasonable description.
1	• Basic description.
0	• Inappropriate answer given. • No response attempted.

4.(b)	**Explain one advantage and one disadvantage of using stratified sampling in psychological research.**	**2+2**

Credit will be given for:

Advantages
- Representativeness.
- Generalisability.
- Less researcher bias.

Disadvantages
- More difficult than other methods.
- Difficult to access subgroups.
- Participant attrition.

- Any other appropriate content.

Marks	AO3
2	• Reasonable explanation of the advantage/disadvantage of stratified sampling.
1	• Basic explanation of the advantage/disadvantage of stratified sampling.
0	• Inappropriate answer given. • No response attempted.

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5.	Explain how you would calculate the mean value of a set of data.	2

Exemplar answers:

- Add all of the values together and divide by the number of values. [2 marks]
- The mean is where you calculate by adding the values together to work out an average. [1 mark]

- Any other appropriate content.

Marks	AO1
2	• Reasonable explanation.
1	• Basic explanation.
0	• Inappropriate answer given. • No response attempted.

6.(a)	Explain the difference between p<0.01 and p<0.05.	2

Exemplar answers:

- P<0.01 shows that there is less than a 1% probability that the results are down to chance whereas p<0.05 shows that there is less than a 5% probability that the results are down to chance. [2 marks]
- P<0.01 is a more stringent measure of significance than p<0.05. [2 marks]
- P<0.01 is stricter. [1 mark]
- P<0.05 is more commonly used. [1 mark]

- Any other appropriate content.

Marks	AO1
2	• Reasonable explanation with reference to both p values.
1	• Basic explanation.
0	• Inappropriate answer given. • No response attempted.

6.(b)	Explain the difference between 'interval data' and 'ratio data'.	2

Exemplar answers:

- Ratio data has a true zero whereas interval does not. [2 marks]
- One has a true zero and the other does not. [1 mark]

- Any other appropriate content.

Marks	AO1
2	• Reasonable explanation.
1	• Basic explanation.
0	• Inappropriate answer given. • No response attempted.

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7.	Evaluate the use of conducting research on-line.	6

Credit will be given for:

- Ability to access participants all over the world comparatively easily (compared to past).
- Ability to access large numbers of participants more easily than if using traditional face to face or questionnaire methods.
- Cost effective as on-line questionnaires can be quickly constructed, distributed for free and results analysed using software that has minimal costs; traditionally there were printing costs, posting costs and payments required to people who input data and analysed results from 'pen & paper' questionnaires.
- Online research could be completed by anyone which may break ethical issues of consent for vulnerable participants.
- Online research could ask sensitive topics which may mean you cannot protect the participant from distress at the time.

- Any other appropriate content.

Marks	AO3
5 - 6	• Thorough evaluation. • Depth and range included. • Structure is logical.
3 - 4	• Reasonable evaluation. • Depth or range. • Structure is reasonable.
1 - 2	• Superficial evaluation. • Answer lacks structure.
0	• Inappropriate answer given. • No response attempted.

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8.(a)	**Describe the sample used in Milgram's (1963) research '*Behavioural study of Obedience*'.**	4

Credit will be given for:

- Participants volunteered after seeing an advertisement in the newspaper.
- 40 males aged between 20-50 years.
- A range of occupations and backgrounds, including teachers and salesmen.
- A range of educational level from degree level to someone who had not finished elementary school.
- Any other appropriate content.

Marks	AO1
3 - 4	• Reasonable description of the sample used in Milgram's research.
1 - 2	• Basic description of the sample used in Milgram's research.
0	• Inappropriate answer given. • No response attempted.

8.(b)	**Briefly evaluate the sample used in Milgram's (1963) research '*Behavioural study of Obedience*'.**	5

Credit will be given for:

Evaluation of content such as:

- The sample was all male so prone to beta bias, meaning the findings could not be generalised to women, but this was acceptable scientific research at the time.
- The sample contained a range of ages, occupations and backgrounds, but it was limited by location (New Haven, USA) meaning the findings cannot be generalised to other cultures; cross cultural studies have produced mixed findings.
- The sample was self-selecting which may have meant that the participants were more likely to take the research seriously; however, only certain people might volunteer for research.
- Although participants responded to the advertisement, Milgram then selected who to use from the volunteer pool, which may have introduced researcher bias.
- Any other appropriate content.

Marks	AO3
5	• Thorough evaluation of the sample. • Structure is mostly logical. • Depth and range but may not be in equal measure.
3 - 4	• Reasonable evaluation of the sample. • Structure is reasonable. • Depth or range.
1 - 2	• Superficial evaluation of the sample. • Answer lacks structure.
0	• Inappropriate answer given. • No response attempted.

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8.(c)	**Briefly evaluate the ethical issues in Milgram's (1963) research '*Behavioural study of Obedience*'.**	**5**

Credit will be given for:

Evaluation of content such as:

- Deception: Milgram informed the participants the research was about memory and learning; the use of a confederate; the lack of actual electric shocks; the use of pre-recorded responses from the Teacher.
- Risk of stress, anxiety, humiliation or pain: Signs of extreme tension were observed, participants "were observed to sweat, tremble, stutter, bite their lips, groan, and dig their fingernails into their flesh".
- Risk to the participants' values, beliefs, relationships, status or privacy: the teachers may have left this research with a negative opinion of their own capabilities which may have had a long-term impact on their own values and beliefs.

- Any other appropriate content.

N.B. Description of the issue above will be limited to 1 – 2 marks band.

Marks	AO3
5	• Thorough evaluation of ethical issues. • Evaluative comments are evidently relevant to the context. • Structure is mostly logical. • Depth and range but may not be in equal measure.
3 - 4	• Reasonable evaluation of ethical issues. • Evaluative comments show some relevance to the context. • Structure is reasonable. • Depth or range.
1 - 2	• Superficial evaluation of ethical issues. • Answer lacks structure.
0	• Inappropriate answer given. • No response attempted.

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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: A quasi-experiment on age and sleep.

9.(a)	**State a fully operationalised hypothesis for your quasi-experiment.**	**2**

There will potentially be substantial differences that reflect the research choices made by each learner.

Exemplar answers:

- People over the age of 60 will require less hours of sleep per night than people under the age of 60. [2 marks]
- Any difference in the number of hours slept per night between people over or under the age of 60 is down to chance. [2 marks]
- Older people need less hours of sleep per night. [1 mark]

- Any other appropriate content.

Marks	AO2
2	• An appropriate fully operationalised hypothesis is stated.
1	• An appropriate partially operationalised hypothesis is stated.
0	• Inappropriate answer given. • No response attempted.

9.(b)	**Justify one reason why a quasi-experiment was the most suitable method for this investigation.**	**2**

There will potentially be substantial differences that reflect the research choices made by each learner.

Exemplar answers:

- A quasi-experiment was more suitable than a lab experiment because the IV of age is a naturally occurring variable. [2 marks]
- Because age is natural. [1 mark]

- Any other appropriate content.

Marks	AO2
2	• Reasonable justification linked to this investigation.
1	• Basic justification linked to this investigation.
0	• Inappropriate answer given. • No response attempted.

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9.(c)	**Explain <u>one</u> issue of reliability which you considered in your quasi-experiment and how you dealt with the issue.**	**4**

There will potentially be substantial differences that reflect the research choices made by each learner.

Exemplar answers:

- One issue might be that if research was carried out in the summer months when the days are longer and people might not need as much sleep, meaning that if the research was repeated in the winter, the findings would not be consistent. [2 marks]
  I dealt with this by conducting my research in the spring when the days and nights are equal which means that my study could be repeated in the autumn to check for consistency. [2 marks]
- Participants with similar ages might not be comparable when it comes to sleeping habits, for example, one baby might sleep through the night on one occasion but have an upset stomach at another time, so my IV of soothing music would not be the influence. [2 marks]
- I dealt with this by repeating my study over five nights and using an average of number of hours slept rather than just from one night. [2 marks]
- The babies might have had different sleep patterns on different nights [1 mark]
  So I tested them over a few nights [1 mark]

- Any other appropriate content.

Marks	AO2
4	• Reasonable explanation of a reliability issue. **AND** • Reasonable explanation of how the issue could be dealt with. • Response is linked to the research.
3	• Reasonable explanation of a reliability issue. **AND** • Basic explanation of how the issue could be dealt with. • Response is linked to the research **OR** • Basic explanation of a reliability issue **AND** • Reasonable explanation of how the issue could be dealt with. • Response is linked to the research.
2	• Basic explanation of a reliability issue. **AND** • Basic explanation of how the issue could be dealt with. • Response is linked to the research. **OR** • Reasonable explanation of a reliability issue linked to the research.
1	• Basic explanation of a reliability issue linked to the research.
0	• Inappropriate answer given. • No response attempted.

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9.(d)	**Explain <u>one</u> ethical issue which you considered in your quasi-experiment and how you managed this ethical issue.**	**4**

There will potentially be substantial differences that reflect the research choices made by each learner.

Exemplar answers:

- By playing music all night for five nights, I could have upset the baby's sleeping patterns which would have left long-term effects from my research. [2 marks]
- I dealt with this by fully informing the parent of the potential long-term effects of the music at night and asking them to agree to take the risk. [2 marks]
- One issue could be that participants were offended to be called 'old'. [1 mark]
  So, I asked them to tell me their age and I categorised by numbers not words. [1 mark]

- Any other appropriate content

Marks	AO2
4	• Reasonable explanation of an ethical issue. **AND** • Reasonable explanation of how the issue could be managed. • Response is linked to the research.
3	• Reasonable explanation of an ethical issue. **AND** • Basic explanation of how the issue could be managed. • Response is linked to the research. **OR** • Basic explanation of an ethical issue. **AND** • Reasonable explanation of how the issue could be managed. • Response is linked to the research.
2	• Basic explanation of an ethical issue. **AND** • Basic explanation of how the issue could be managed. • Response is linked to the research. **OR** • Reasonable explanation of an ethical issue linked to the research.
1	• Basic explanation of an ethical issue linked to the research.
0	• Inappropriate answer given. • No response attempted.

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9.(e)	**Identify and justify the descriptive statistic you used to analyse the data in your quasi-experiment.**	**1+2**

There will potentially be substantial differences that reflect the research choices made by each learner.

Exemplar answers:

- I calculated a mean because I counted the number of hours slept per night by each baby, which is interval data. [2 marks]
- I calculated a range because sleep is interval data. [1 mark]
- I looked for the mode because I had nominal data measured as categories of age groups. [2 marks]
- The mode because I had age groups. [1]
- I used a median as I had an anomaly because one person was over 100, which would make the mean not appropriate. [2]
- The median to rule out anomalies in sleep. [1]

- Any other appropriate content

Marks	AO2
3	• Identification of an appropriate descriptive statistic. **AND** • Reasonable justification linked to the research.
2	• Identification of an appropriate descriptive statistic **AND** • Basic justification linked to the research.
1	• Identification of an appropriate descriptive statistic.
0	• Inappropriate answer given. • No response attempted.

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INVESTIGATION TWO: A correlational study using a Stroop test.

10.(a) (i)	**State the aim of your correlational study.**	**2**

There will potentially be substantial differences that reflect the research choices made by each learner.

Exemplar answers:

- To find out if there is a relationship between scores on the Stroop test and the stress caused by an unexpected class test. [2 marks]
- To investigate the relationship between the Stroop test and age. [1 mark]
- Any other appropriate content.

N.B. No credit for a hypothesis.

Marks	AO2
2	• Reasonable aim is stated.
1	• Basic aim is stated.
0	• Inappropriate answer given. • No response attempted.

10.(a) (ii)	**State the operationalised co-variables that you used in your investigation.**	**1+1**

Credit will be given for:

- Identification of an appropriate operationalised co-variable (e.g. score on Stroop test).
- Any other appropriate content.

Marks	AO2
1	• Appropriate identification of an operationalised co-variable.
0	• Inappropriate answer given. • No response attempted.

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10.(b)	**Identify the sampling technique you used to recruit participants for your correlational study and justify your choice of sampling technique.**	**1+2**

Credit will be given for:

- Appropriate identification of an appropriate sampling technique. [1]
- Appropriate justification for the choice of sampling technique. [2]

- Any other appropriate content.

Exemplar answer:

- I used opportunity sampling because it was quicker to ask friends and family if they would like to take part than to put up an advert in school and wait for responses. [2 marks]
- I used volunteer sampling because it was quicker than getting everyone's names. [1 mark]

Marks	AO2
3	• Identification of appropriate sampling technique. **AND** • Reasonable justification of this sampling technique linked to the research.
2	• Identification of appropriate sampling technique. **AND** • Basic justification of this sampling technique linked to the research.
1	• Identification of appropriate sampling technique.
0	• Inappropriate answer given. • No response attempted.

10.(c) (i)	**Identify an appropriate graphical representation which could be drawn from the data you collected in your correlational study.**	**1**

Credit will be given for:

- Scattergram.
- Scatterplot.

- Any other appropriate content.

Marks	AO2
1	• Appropriate graphical representation is identified.
0	• Inappropriate answer given. • No response attempted.

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10.(c) (ii)	**Identify the inferential statistic you used to analyse the data you collected for your correlational study.**	**1**

Exemplar answers:

- I calculated a Spearman's rank test. [1]
- I calculated a Spearman's test. [1]
- Spearman's rho [1]
- Pearson's test [1]

- Any other appropriate content.

Marks	AO2
1	• Identification of an appropriate inferential statistic.
0	• Inappropriate answer given. • No response attempted.

10.(c) (iii)	**Explain <u>two</u> reasons why the inferential statistic identified in 10. (c) (ii) was appropriate.**	**2**

There will potentially be substantial differences that reflect the research choices made by each learner.

Exemplar answers:

- I was testing for a relationship between age groups and Stroop results and the data was ratio as it was age in years and time in seconds to complete test. (Pearson's test) [2 marks]
- I was testing for a relationship between Stroop test scores and alertness, and I had ordinal data. (rating on an alertness scale). (Spearman's test). [2 marks]
- I was testing for a correlation and my data was at least ordinal (Stroop test). [1 mark]

- Any other appropriate content.

Marks	AO2
2	**Two** of the features below: • Test of correlation and linked to the investigation. • Appropriate level of measurement linked to the investigation. • Related data and linked to the investigation.
1	**One** of the features below: • Test of correlation and linked to the investigation. • Appropriate level of measurement and linked to the investigation. • Related data and linked to the investigation.
0	• Inappropriate answer given. • No response attempted.

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10.(d)	**Explain <u>one</u> issue of validity which you considered in your correlational study and explain how you dealt with this issue.**	**4**

There will potentially be substantial differences that reflect the research choices made by each learner.

Exemplar answers:

- One issue might be that some participants could have been colour blind and would not be able to complete the Stroop test accurately. [2 marks]
  I dealt with this by asking all of the participant to disclose if they were known to be colour blind and then carried out a simple colour wheel test to check for anyone who might not know they are colour blind. [2 marks]
- If one student needed an A* for their university place and another student was not going to university would affect how stressed they were. [2 marks]
  So I used a matched pairs design to make sure I compared the Stroop test results between students with similar pressure on their exam results. [2 marks]
- Some student might know what I am looking for and show social desirability bias. [1 mark]
  So I told them that the study was looking for something other than stress. [1 mark]

- Any other appropriate content.

Marks	AO2
4	• Reasonable explanation of an issue. **AND** • Reasonable explanation of how the issue could be dealt with. • Response is linked to the investigation.
3	• Reasonable explanation of an issue. **AND** • Basic explanation of how the issue could be dealt with. • Response is linked to the investigation. **OR** • Basic explanation of an issue. **AND** • Reasonable explanation of how the issue could be dealt with. • Response is linked to the investigation.
2	• Basic explanation of an issue. **AND** • Basic explanation of how the issue could be dealt with. • Response is linked to the investigation. **OR** • Reasonable explanation of an issue linked to the research.
1	• Basic explanation of an issue linked to the research.
0	• Inappropriate answer given. • No response attempted.

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

Answer **all** the questions.

11. A researcher wanted to test the hypothesis that left-handed people are more creative than right-handed people. A quota sample of 100 students at university were asked to take part in an online investigation. The participants stated whether they were left-handed or right-handed and also which subjects they had chosen to study for their degree. Subjects such as Art and Photography were classified as 'creative' and subjects such as Mathematics and Science were classified as 'non-creative' by the researcher.

11. (a)	**State an operationalised null hypothesis for this investigation.**	**2**

Exemplar answers:

- Any difference between subjects studied (creative or non-creative) for left or right-handed students will be down to chance [2 marks]
- There will be no significant difference between the subjects studied by left or right-handed students [1 mark]

- Any other appropriate content.

Marks	**AO2**
2	• Fully operationalised, reasonable null hypothesis linked to the research.
1	• Partially operationalised, basic null hypothesis linked to the research.
0	• Inappropriate answer given. • No response attempted.

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The findings are shown below (**Figure 1**).

Figure 1: The number of students studying each subject type

Handedness	Creative	Non - creative
Left	8	2
Right	34	56

11.(b)	**Identify an appropriate measure of central tendency for this data and explain why this measure is suitable for the data in Figure 1.**	**3**

Exemplar answers:

- The mode because the data is measuring the frequency of left and right-handed people who are studying each subject. [2 marks]
- The mode because the data is nominal categories of handedness. [1 mark]
- The mode.

- Any other appropriate content.

Marks	**AO2**
3	• Accurate identification of the mode. **AND** • Reasonable explanation of why the mode is the most suitable measure linked to the research.
2	• Accurate identification of the mode. **AND** • Basic explanation of why the mode is the most suitable measure linked to the research.
1	• Accurate identification of the mode.
0	• Inappropriate answer given. • No response attempted.

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11.(c)	**The researcher carried out a Chi Square test and found an observed (calculated) value of 6.54. The degrees of freedom (df) was 2. Identify the appropriate critical value from Figure 2 and explain why the psychologist should accept or reject the null hypothesis at p<0.05.**	**3**

Figure 2 Level of significance for a two-tailed test (non-directional hypothesis)

df	0.10	0.05	0.025	0.01
1	2.71	3.84	5.02	6.64
2	4.61	5.99	7.38	9.21
3	6.25	7.82	9.35	11.35
4	7.78	9.49	11.14	13.28
5	9.24	11.07	12.83	15.09
6	10.65	12.59	14.45	16.81
7	12.02	14.07	16.01	18.48
8	13.36	15.51	17.54	20.09
9	14.68	16.92	19.02	21.67
10	15.99	18.31	20.48	23.21

Exemplar answers:

- They should reject the null hypothesis because the calculated value of 6.54 is higher than the critical value of 5.99. [3 marks]
- They should reject the null hypothesis because the calculated value of 6.54 is higher than the critical value. [2 marks]
- They should reject the null hypothesis. [1 mark]

- Any other appropriate content.

Marks	AO2
3	**Three** of the following: • Accurate rejection of the null hypothesis • Appropriate identification of the critical value • Justification is linked to the research.
2	**Two** of the following: • Accurate rejection of the null hypothesis • Appropriate identification of the critical value • Justification is linked to the research.
1	**One** of the following: • Accurate rejection of the null hypothesis • Appropriate identification of the critical value • Justification is linked to the research.
0	• Inappropriate answer given. • No response attempted.

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12. A group of researchers wanted to investigate if adverts aimed at children promoted active or non-active play. They selected 50 adverts shown during children's TV programmes. Each researcher counted the main type of play seen in the advert. The data is displayed in Fig. 3 below:

Figure 3: Main types of play seen in the adverts.

Type of play	Number of times the type of play was seen
Running	14
Computer / screen based	26
Cycling	6
Art and Craft	4

12.(a)	Identify the level of measurement of the data in this research.	1

Credit will be given for:

- Nominal data.
- Frequency data.

- Any other appropriate content.

Marks	AO2
1	• Accurate identification.
0	• Inappropriate answer given. • No response attempted.

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12.(b)	**Explain <u>one</u> issue of reliability with this investigation and how the researcher could have assessed the issue.**	**4**

Exemplar answers:

- One issue of reliability could be that there are several researchers who watched the TV adverts and they could all have had different opinions as to what is active on non-active play. [2 marks]
- The researchers should have assessed inter-rater reliability by comparing the tallies and seeing if there was a strong positive correlation between their assessment of play types. [2 marks]
- One issue is that the researchers may not agree on what they are seeing in the advert. [1 mark]
- To assess this, the researchers should carry out inter-rater reliability tests to compare their tallies of types of play. [1 mark]

- Any other appropriate content.

Marks	AO2
4	• Reasonable explanation of an issue. **AND** • Reasonable explanation of how the issue could be assessed. • Response is linked to the research.
3	• Reasonable explanation of an issue. **AND** • Basic explanation of how the issue could be assessed. Response is linked to the research. **OR** • Basic explanation of an issue. **AND** • Reasonable explanation of how the issue could be assessed. • Response is linked to the research.
2	• Basic explanation of an issue. **AND** • Basic explanation of how the issue could be assessed. • Response is linked to the research. **OR** • Reasonable explanation of an issue linked to the research.
1	• Basic explanation of an issue linked to the research.
0	• Inappropriate answer given. • No response attempted.

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12.(c) (i)	**Calculate the percentage of adverts that contained computer/ screen-based activity. Show your workings.**	**2**

Credit will be given for:

- Accurate answer with correct working out:
- Computer/screen based activity = 26
- Divided by total number of adverts = 50 equals 0.52
- Multiplied by 100 = 52% [2 marks]

- 26/50 = x 100 = 52% [2 marks]

- 26/50 = x 100 = 50% [1 mark]

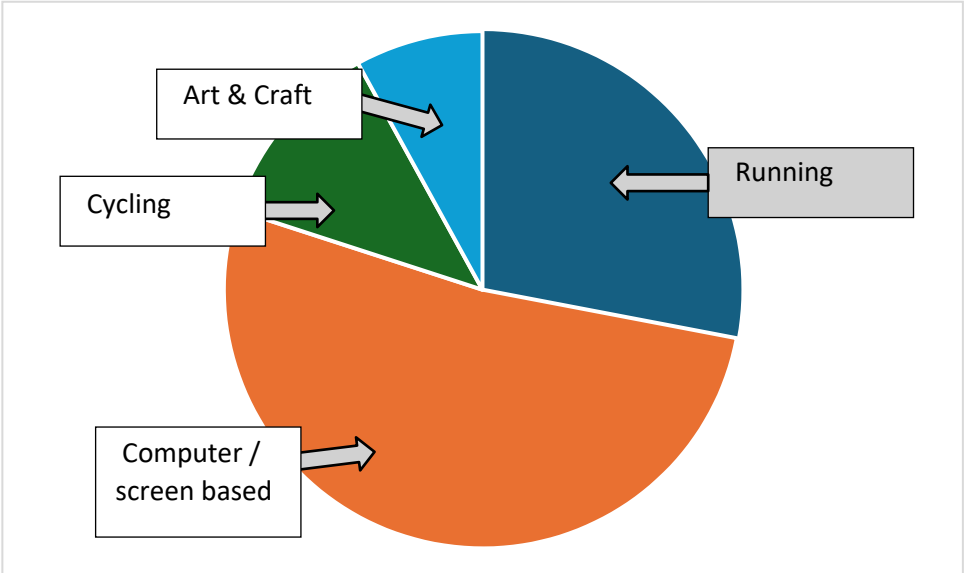
- 52% [1 mark]

- Any other appropriate content.

Marks	AO2
2	• Accurate calculation of answer and correct workings.
1	• Accurate calculation of answer without correct workings. **OR** • Accurate workings leading to an inaccurate calculation.
0	• Inappropriate answer given. • No response attempted.

12.(c) (ii)	**Identify the type of graphical representation used in Figure 4 below and then complete the labels of the three blank segments on Figure 4.**	**4**

Figure 4: Graphical representation of the proportion of adverts containing each type of play seen.



1 mark for correct identification of a pie chart.
1 mark for each accurate type of play identified.

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12.(c) (iii)	**Apart from the graphical representation used in Figure 4, identify an alternative appropriate graphical representation that could be used to display the data in this research.**	**1**

Exemplar answer:

- Bar chart.
- Pictogram.

- Any other appropriate content.

Marks	AO2
1	• Appropriate identification of an appropriate graphical representation.
0	• Inappropriate answer given. • No response attempted.

12.(d)	**Evaluate <u>two</u> disadvantages of using qualitative data in psychological research.**	**2+2**

Credit will be given for:

- The data may be less reliable as it might be a record of people's opinions at the time which may not be the same if the test was retested with the same participant at a later date.
- The data might not be easy to analyse as it usually contains words or a transcript from an interview which is time consuming to analyse.
- The data might not be valid as interviews might be analysed differently by different researchers leading to bias in how the information is interpreted.
- Qualitative methods are often face to face which might mean the participant is less likely to withdraw if they feel uncomfortable, unlike a written questionnaire, making the study more prone to ethical issues.

- Any other appropriate content.

Marks	AO3
2	• Reasonable evaluation of the disadvantage.
1	• Basic evaluation of the disadvantage.
0	• Inappropriate answer given. • No response attempted.

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