(d)   Outline **one** advantage and **one** disadvantage of quota sampling in this
      research.   **[3]**

      Credit **could** be given for:
      - Advantage, e.g. all sub-groups of drivers in the target population,
        specifically different ages, are represented in the sample group.
      - Disadvantage, e.g. those drivers selected from the sub-groups may not be
        representative of those in that sub-group, such as those drivers in their
        fifties may all be male.
      - Other appropriate advantage and disadvantage.

Marks	AO3
3	An appropriate advantage and disadvantage are identified and both are clearly linked to the novel situation.
2	An appropriate advantage and disadvantage are identified and there are weak links to the novel situation **OR** An appropriate advantage and disadvantage are noted but only one of these is clearly linked to the novel situation.
1	An appropriate advantage and disadvantage are identified and there are no links to the novel situation **OR** An appropriate advantage or disadvantage is noted with a weak link to the novel situation.
0	An appropriate advantage or disadvantage is noted but there is no link to the novel situation **OR** The issue is not addressed.

(e)   Discuss **one** ethical issue that might arise in this research.   **[3]**

      Credit **could** be given for:
      - Failure to inform participants of their right to withdraw may occur if the
        researchers do not inform the car drivers before the research that they
        can leave the simulator at any time.
      - Other appropriate ethical issue.

Marks	AO3
3	An appropriate ethical issue is identified and thoroughly discussed with clear links to the novel situation.
2	An appropriate ethical issue is identified and reasonably discussed with some link to the novel situation.
1	An appropriate ethical issue is discussed but with no links to the novel situation **OR** A reasonable ethical discussion which is clearly linked to the scenario but the issue is not clearly identified**.**
0	An ethical issue is not discussed.

(f)   State **one** conclusion that can be drawn from the scattergraph in this
        research.   **[3]**

        Credit **could** be given for:
        • Example - There does not appear to be a correlation between the age of
          the car driver (years) and the number of driving errors made.
        • Other appropriate conclusion.

Marks	AO3
3	An appropriate and accurate conclusion has been stated fully and clearly with a link to the data in the novel situation.
2	An appropriate and accurate conclusion has been stated with a weak link to the novel situation **OR** An inferential conclusion has been given which has been clearly linked to the data in the novel situation.
1	An appropriate and accurate conclusion has been stated but there is no link to the novel situation.
0	An inappropriate or inaccurate conclusion has been stated **OR** The issue is not addressed.

PY3

SECTION A

Q.1 A laboratory experiment was carried out to investigate whether audio presentation of information is more effective than visual presentation in improving memory recall. Two groups of ten participants were selected by random sampling. Group one (audio) was given a memory test which involved them listening to a list of twenty objects that was read aloud. The participants then wrote down as many objects as they could remember. Group two (visual) was given a memory test later in the day but instead of the names of the objects being read aloud, images of the same objects were shown.

The results supported the hypothesis', 'visual presentation improves memory recall better than audio methods of presentation.'

(a) (i) Define what is meant by the term 'laboratory experiment'. **[2]**

- A study that takes place within a controlled environment.
- A study that takes place within an artificial setting.
- Any other relevant definition.

Marks	AO1
2	Clear and detailed definition given.
1	Basic definition.
0	No relevant definition.

(ii) Explain one advantage and one disadvantage of a laboratory experiment. **[4]**

Advantage
- Good internal validity.
- Control of confounding variables.
- Show cause and effect.
- Any other relevant advantage.

Disadvantage
- Behaviour may be artificial and results in poor ecological validity.
- Demand characteristics can affect results.
- Any other relevant disadvantage.

Marks	AO2
4	One clear advantage and one clear disadvantage identified and both explained in detail.
3	One clear advantage/disadvantage identified and explained in detail and one disadvantage/advantage only partially explained.
2	One advantage and one disadvantage only partially explained **OR** Only one advantage/disadvantage identified and explained in detail.
1	Only one advantage **OR** one disadvantage identified.
0	No relevant information.

(b)　(i)　Define what is meant by the term 'hypothesis'.　　**[2]**

Marks	AO1
2	Clear and detailed definition, e.g. a testable statement that a piece of research attempts to support or reject.
1	Basic definition, e.g. a testable statement.
0	No relevant definition.

(ii)　Identify the independent variable (IV) in the above study.　　**[1]**

Marks	AO2
1	The IV identified, e.g. method of presenting information visual or audio.
0	No relevant information.

(iii)　Identify the dependent variable (DV) in the above study.　　**[1]**

Marks	AO2
1	The DV identified, e.g. memory/object recall.
0	No relevant information.

(iv)　State an appropriate non-directional hypothesis for this study.　　**[2]**

Marks	AO2
2	Appropriate non-directional hypothesis stated, e.g. different methods of presentation can affect memory.
1	Non-directional hypothesis given but IV or DV missing. Basic or muddled statement, e.g. presentation affects memory.
0	No relevant information.

(c)　Define what is meant by the term 'validity'.　　**[2]**

- The findings are accurate and the effects are caused by the IV.
- The study is measuring what it intends to measure.
- True to life (ecological validity).
- Any other relevant definition.

Marks	AO1
2	Clear and detailed definition.
1	Basic definition.
0	No relevant definition.

(d)   Explain how the content validity could be assessed in the above study.   **[2]**

- Ensure the objects are clearly named.
- Ensure the objects are clearly recognisable.
- Any other relevant explanations.

Marks	AO3
2	Clear explanation of how content validity can assess validity (with context).
1	Partial explanation of how content validity can assess validity or no context.
0	No relevant information.

(e)   Give one advantage of using random sampling.   **[2]**

- Everyone in the target population has the same chance of being chosen.
- No sampling/experimenter bias.
- Any other relevant explanations.

Marks	AO2
2	Clear advantage identified and explained in detail.
1	Advantage only identified or partially explained.
0	No relevant definition.

(f)   Identify and explain one confounding variable that may affect psychological research.   **[2]**

- Time of day test took place.
- Characteristic/mood of the participant.
- Individual differences between groups used, one group higher IQ.
- Any other relevant information.

Marks	AO2
2	Confounding variable identified and affect on study explained.
1	An appropriate confounding variable is identified but effect not explained.
0	No relevant information.

(g)   A Mann Whitney U test was used to analyse the data in this study. Give two
        reasons why this test was appropriate.   **[2]**

- Independent data/independent groups design.
- Ordinal level of measurement.
- Any other relevant explanation.

Marks	AO3
2	Two clear reasons given.
1	Only one clear reason given.
0	No relevant information.

(h)   Describe what is meant in psychological research by:

(i)   'A lack of informed consent':   **[2]**

- Lack of informed consent means not informing the participants
  about the full purpose of specific research.
- Any other relevant description.

Marks	AO1
2	Ethical issue is clearly described.
1	Description is limited or basic.
0	No relevant information.

(ii)   'Failure to protect participants from psychological harm'.   **[2]**

- Not protecting participants from embarrassment or stress.
- Any other relevant description.

Marks	AO1
2	Ethical issue is clearly described.
1	Description is limited or basic.
0	No relevant information.

SECTION B

Q.2 A psychologist carried out a study on a young woman who was suffering from sleep deprivation due to nightmares. These were so frightening that they were waking her up. The young woman was asked to keep a diary of these nightmares over a three month period. The psychologist researched the young woman's background, collecting information on her family, her childhood experiences and her medical history. The psychologist came to the conclusion that the nightmares were linked to the young woman's experiences as a child when she suffered from a fear of the dark.

    (a)   (i)   Define what is meant by the term 'case study'. **[2]**

Marks	AO2
2	Clear and detailed definition, e.g. a detailed description and interpretation of one person's behaviour (data tends to be qualitative).
1	Basic definition, e.g. a detailed description of one person or a group of people.
0	No relevant definition.

           (ii)   Explain one advantage and one disadvantage of a case study. **[4]**

Advantage
- It provides a richer account of behaviour than could be achieved by using more quantitative methods.
- It emphasises the uniqueness of each individual.
- Any other relevant advantage.

Disadvantage
- Findings cannot be generalised to other people.
- Very subjective and the behaviour could be mis-interpreted to support the researcher's ideas.
- Any other relevant disadvantage.

Marks	AO2
4	One clear advantage and one clear disadvantage identified and explained in detail.
3	One advantage and one disadvantage identified and only partially explained.
2	Only one advantage/disadvantage identified and explained in detail **OR** both advantage and disadvantage identified but not explained.
1	Only one advantage or one disadvantage identified.
0	No relevant information.

(b)   Qualitative data can be analysed by using content analysis. Explain one
      advantage of using content analysis in psychological research   **[2]**

- Can be used to reduce qualitative data into a more quantitative form.
- Can identify trends and patterns in behaviour.
- Any other relevant advantage.

Marks	AO2
2	Clear advantage identified and explained in detail.
1	Advantage only identified or partially explained.
0	No relevant information.

(c)   Define what is meant by the term 'reliability'.   **[2]**

- A study is carried out and produces consistent results.
- Consistency of the measuring tool.
- Any other relevant definition.

Marks	AO1
2	Clear and detailed definition given.
1	Basic definition.
0	No relevant definition.

(d)   (i)   Explain one issue that would affect the validity of the psychologist's
             interpretation of the young woman's nightmares.   **[2]**

- Interpretation of nightmares is very subjective.
- Lack of scientific research in subject area.
- The nightmares remembered are incorrect.
- Any other relevant issue.

Marks	AO3
2	Clear and detailed explanation (with context).
1	Basic explanation or no context.
0	No relevant information.

(ii)   Explain one issue that would effect the validity of the content of the
       young woman's diary.   **[2]**

- Remembering the nightmares incorrectly.
- The time the woman actually records her nightmares in the diary.
- Any other relevant issue.

Marks	AO3
2	Clear and detailed explanation (with context).
1	Basic explanation or no context.
0	No relevant information.

(e)   (i)   A case study can produce qualitative data. Define what is meant by the term 'qualitative data'. **[2]**

- Data that is non-numerical and is descriptive.
- Any other relevant definition.

Marks	AO1
2	Clear and detailed definition given.
1	Basic definition.
0	No relevant definition.

(ii)   Explain one advantage of qualitative data. **[2]**

- Can produce a lot of in-depth information.
- Specific themes and patterns can be identified.
- Any other relevant advantage.

Marks	AO2
2	Clear advantage explained in detail.
1	Advantage only identified or partially explained.
0	No relevant information.

(iii)   Explain one disadvantage of qualitative data. **[2]**

- Data is very difficult to analyse.
- Lacks objectivity, analysis is affected by researcher's viewpoint.
- Any other relevant disadvantage.

Marks	AO2
2	Clear disadvantage explained in detail.
1	Disadvantage only partially explained or only identified.
0	No relevant information.

(f)   Describe what is meant in psychological research by:

(i)   'Deception': **[2]**

- Misleading or withholding information from participants.
- Any other relevant description.

Marks	AO1
2	Ethical issue is clearly described.
1	Description is limited or basic.
0	No relevant information.

(ii)   'Confidentiality'.   **[2]**

- Confidentiality means keeping all information private, e.g. names of participants and their results.
- Any other relevant description.

Marks	AO1
2	Ethical issue is clearly described.
1	Description is limited or basic.
0	No relevant information.

Total 24 marks

SECTION C

Q.3 Explain the advantages of the use of the scientific method in psychology. **[15]**

Credit **could** be given for the following:
- Examples of relevant research.
- Showing cause and effect within a laboratory experiment.
- Control of confounding variables.
- Validity/reliability results in ethical applications.
- Use of animals to compare to human behaviour.
- Support from psychological approaches, e.g. biological.
- Historically well-established method.
- Any other relevant material.

Marks	AO3
12-15	Discussion is appropriate and well detailed. Material is used in an effective manner (evidence of coherent elaboration) and is thorough. Depth and range of knowledge is displayed, though not necessarily in equal measure. Specialist terms are used throughout.
8-11	Discussion is reasonably appropriate but less detailed. Material is used in an effective manner. Depth or range of knowledge is displayed. Some specialist terms.
4-7	Discussion is basic; material is used in a relevant manner but is limited. Few specialist terms.
1-3	Discussion is superficial; material is muddled and/or incoherent. Specialist terms are either absent or incorrect.
0	No relevant knowledge or understanding of relevant material is demonstrated.