

OXFORD

INTERNATIONAL
AQA EXAMINATIONS

INTERNATIONAL AS PSYCHOLOGY

(9685)

Mark scheme

Unit 2: Biopsychology, development and research methods 1

Specimen 2018

Mark schemes are prepared by the lead assessment writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same, correct way. As preparation for standardisation each associate analyses a number of students' scripts. Alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the lead assessment writer.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

International AS Psychology mark scheme

How to mark

Aims

When you are marking your allocation of scripts your main aims should be to:

- recognise and identify the achievements of students
- place students in the appropriate mark band and in the appropriate part of that mark band (high, low, middle) for **each** Assessment Objective
- record your judgements with brief notes, annotations and comments that are relevant to the mark scheme and make it clear to other examiners how you have arrived at the numerical mark awarded for each Assessment Objective
- ensure comparability of assessment for all students, regardless of question or examiner.

Approach

It is important to be **open-minded** and **positive** when marking scripts.

The specification recognises the variety of experiences and knowledge that students will have. It encourages them to study psychology in a way that is relevant to them. The questions have been designed to give them opportunities to discuss what they have found out about psychology. It is important to assess the quality of **what the student offers**.

Do not mark scripts based on the answer **you** would have written. The mark schemes have been composed to assess **quality of response** and not to identify expected items of knowledge.

Assessment Objectives

This component requires students to:

| | |
|-----|---|
| AO1 | Demonstrate knowledge and understanding of scientific ideas, processes, techniques and procedures. |
| AO2 | Apply knowledge and understanding of scientific ideas, processes, techniques and procedures: <ul style="list-style-type: none"> • in a theoretical context • in a practical context • when handling qualitative data • when handling quantitative data. |
| AO3 | Analyse, interpret and evaluate scientific information, ideas and evidence, including in relation to issues, to: <ul style="list-style-type: none"> • make judgements and reach conclusions • develop and refine practical design and procedures. |

The marking grids

Do not think of levels equalling grade boundaries.

Depending on the part of the examination, the levels will have different mark ranges assigned to them. This will reflect the different weighting of Assessment Objectives in particular tasks and across the examination as a whole.

Using the grids

Having familiarised yourself with the descriptors and indicative content, read through the answer and annotate it (as instructed below) to identify the qualities that are being looked for and that it shows. You can now check the levels and award a mark.

Step 1 Determine a level

Start at the lowest level of the mark scheme and use it as a ladder to see whether the answer meets the descriptors for that level. The descriptors for the level indicate the different qualities that might be seen in the student's answer for that level. If it meets all the descriptors for the lowest level then go to the next one and decide if it meets this level, and so on, until you have a match between the level descriptors and the answer. With practice and familiarity you will find that for better answers you will be able to skip through the lower levels of the mark scheme quickly.

When assigning a level you should look at the overall quality of the answer and not look to pick holes in small and specific parts of the answer where the student has not performed quite as well as the rest. If the answer covers different aspects of different levels of the mark scheme you should use a best-fit approach for defining the level and then use the variability of the response to help decide the mark within the level.

Step 2 Determine a mark

Once you have assigned a level you need to decide on the mark.

It is often best to start in the middle of the level's mark range and then check and adjust. If there is a lot of indicative content fully identifiable in the work you need to give the highest mark in the level. If only some is identifiable or it is only partially fulfilled, then give the lower mark.

The exemplar materials used during standardisation will also help. There will be an answer in the standardising materials that will correspond with each level of the mark scheme. This answer will have been awarded a mark by the lead examiner. You can compare the student's answer with the example to determine if it is of the same standard, better or worse than the example. You can then use this to allocate a mark for the answer based on the lead examiner's mark on the example.

You may well need to read back through the answer as you apply the mark scheme to clarify points and assure yourself that the level and the mark are appropriate.

In addition to the levels descriptors, question specific indicative content is provided as a guide for examiners. This is not intended to be exhaustive and you must credit other valid points.

An answer that contains nothing of relevance to the question must be awarded no marks.

Annotating scripts

You should write a summative comment at the end for each Assessment Objective and indicate the marks for each Assessment Objective being tested at the end of the answer in the margin in sequence. It is vital that the way you arrive at a mark should be recorded on the script. This will help you with making accurate judgements and it will help any subsequent markers to identify how you are thinking. Please do not write negative comments about students' work or their alleged aptitudes; this is unprofessional and it impedes a positive marking approach.

Section A: Biopsychology

Total for this section: 30 marks

| Question | Part | Marking guidance | Total marks |
|----------|------|--|-----------------------|
| 01 | | <p>Use your knowledge of localisation of function in the brain to identify the centres or areas of the brain named below.</p> <p>In each case, match the named area with the appropriate label (A–F) from Figure 1. Shade one box only for each area.</p> <p>1.1 A</p> <p>1.2 C</p> <p>1.3 D</p> <p>1.4 E</p> <p>1.5 B</p> | <p>5</p> <p>AO1=5</p> |
| 02 | | <p>Below is a diagram of a sensory neuron (Figure 2). Name the structures labelled a–d. Write the name of each structure in the box provided.</p> <p>1 mark for each correctly labelled box as follows:</p> <p>a) Axon</p> <p>b) Myelin sheath</p> <p>c) Cell body</p> <p>d) Nucleus</p> | <p>4</p> <p>AO1=4</p> |
| 03 | | <p>Identify two other types of neuron. Briefly describe the function of each type.</p> <p>Marks for this question: AO1=6</p> <p>1 mark each for identifying motor neuron and relay (or inter/connecting) neuron.</p> <p>Plus in each case:</p> <p>2 marks for a clear description of the function of the neuron using appropriate terminology.</p> <p>1 mark for a limited/vague/muddled description of the function of the neuron.</p> <p>0 marks for no relevant content.</p> <p>Content:</p> <ul style="list-style-type: none"> • Motor neuron – connects central nervous system to muscles and glands, transmitting information from the brain/CNS to muscles and glands resulting in action/movement/bodily activity. • Relay (inter/connecting) neuron – connects neurons to other neurons, are mostly found in the brain and involved in messaging/processing within the brain. | <p>6</p> <p>AO1=6</p> |

| Question | Part | Marking guidance | Total marks | | | | | | | | | | | | | | | |
|----------|--|--|-------------|-------------|-------|---|--|-----|---|--|-----|---|--|-----|---|------------------------|--|------------------------------|
| 04 | | <p>Amir gets nervous on the day of his driving test. In the morning, his mouth is dry and he cannot eat. Just before the test, his hands are all sticky as he starts to sweat. After the test, he feels hungry and tired.</p> <p>Use your knowledge of the autonomic nervous system to explain Amir's experience.</p> <p>Possible answers include:</p> <ul style="list-style-type: none"> • Amir's experience is due to action of sympathetic and parasympathetic sections of the autonomic nervous system. • ANS is responsible for Amir's arousal (via fight or flight response) in time of stress/anxiety. • Sympathetic section of ANS a) slows down digestion so Amir's mouth is dry/he cannot eat and b) makes him sweat (due to adrenalin action). • Parasympathetic action of the ANS restores function to normal (rest and digest) when the threat/anxiety has passed, so Amir feels hungry and tired. <table border="1" data-bbox="368 958 1273 1417"> <thead> <tr> <th data-bbox="368 958 480 1010">Level</th> <th data-bbox="480 958 1145 1010">Description</th> <th data-bbox="1145 958 1273 1010">Marks</th> </tr> </thead> <tbody> <tr> <td data-bbox="368 1010 480 1128">3</td> <td data-bbox="480 1010 1145 1128">Knowledge of the ANS is clear and application is effective. The answer is clear with appropriate use of terminology.</td> <td data-bbox="1145 1010 1273 1128">6–5</td> </tr> <tr> <td data-bbox="368 1128 480 1247">2</td> <td data-bbox="480 1128 1145 1247">Some knowledge of the ANS is present and there is some appropriate application. The answer lacks clarity/use of terminology in places.</td> <td data-bbox="1145 1128 1273 1247">4–3</td> </tr> <tr> <td data-bbox="368 1247 480 1364">1</td> <td data-bbox="480 1247 1145 1364">Knowledge of the ANS is limited or very limited. Application is either inappropriate or absent. The answer is vague/muddled.</td> <td data-bbox="1145 1247 1273 1364">2–1</td> </tr> <tr> <td data-bbox="368 1364 480 1417">0</td> <td data-bbox="480 1364 1145 1417">No creditable content.</td> <td data-bbox="1145 1364 1273 1417"></td> </tr> </tbody> </table> | Level | Description | Marks | 3 | Knowledge of the ANS is clear and application is effective. The answer is clear with appropriate use of terminology. | 6–5 | 2 | Some knowledge of the ANS is present and there is some appropriate application. The answer lacks clarity/use of terminology in places. | 4–3 | 1 | Knowledge of the ANS is limited or very limited. Application is either inappropriate or absent. The answer is vague/muddled. | 2–1 | 0 | No creditable content. | | <p>6</p> <p>AO2=6</p> |
| Level | Description | Marks | | | | | | | | | | | | | | | | |
| 3 | Knowledge of the ANS is clear and application is effective. The answer is clear with appropriate use of terminology. | 6–5 | | | | | | | | | | | | | | | | |
| 2 | Some knowledge of the ANS is present and there is some appropriate application. The answer lacks clarity/use of terminology in places. | 4–3 | | | | | | | | | | | | | | | | |
| 1 | Knowledge of the ANS is limited or very limited. Application is either inappropriate or absent. The answer is vague/muddled. | 2–1 | | | | | | | | | | | | | | | | |
| 0 | No creditable content. | | | | | | | | | | | | | | | | | |

| Question | Part | Marking guidance | Total marks | | | | | | | | | | | | | | | |
|----------|---|---|--------------|-------------|-------|---|---|-----|---|---|-----|---|--|-----|---|------------------------|--|---|
| 05 | | <p data-bbox="370 217 783 248">Describe split brain research.</p> <p data-bbox="370 275 496 306">Content:</p> <ul data-bbox="370 333 1278 1055" style="list-style-type: none"> <li data-bbox="370 333 1209 465">• Carried out with epilepsy patients whose left and right side (hemispheres) are surgically separated (by cutting the corpus callosum), which stops communication between left and right sides of brain. <li data-bbox="370 492 1214 557">• Sperry showed patients separate images to their left and right visual field. <li data-bbox="370 584 1267 687">• Information from left visual field is normally processed by the right side of the brain and information from the right visual field is normally processed by the left side of the brain. <li data-bbox="370 714 1278 817">• Sperry found patients could not use language (normally processed in the left brain) to name/describe an object shown to the left visual field. <li data-bbox="370 844 1219 909">• Even though patients could not name objects presented to left visual field they could identify them by touch. <li data-bbox="370 936 1150 967">• In most other ways patients' behaviour appeared normal. <li data-bbox="370 994 1206 1059">• Sperry showed the effects of disrupting the normal sharing of information between left and right hemispheres. <p data-bbox="370 1086 1098 1117">Credit other relevant aspects of procedure and findings.</p> <table border="1" data-bbox="370 1133 1275 1731"> <thead> <tr> <th data-bbox="378 1144 477 1176">Level</th> <th data-bbox="481 1144 1142 1176">Description</th> <th data-bbox="1147 1144 1267 1176">Marks</th> </tr> </thead> <tbody> <tr> <td data-bbox="378 1189 477 1220">3</td> <td data-bbox="481 1189 1142 1339">Knowledge of split brain research is accurate and detailed. The answer is clear and organised. There is some effective use of specialist terminology.</td> <td data-bbox="1147 1189 1267 1220">9–7</td> </tr> <tr> <td data-bbox="378 1352 477 1384">2</td> <td data-bbox="481 1352 1142 1503">Knowledge of split brain research is evident but there are occasional inaccuracies/omissions. The answer lacks clarity and organisation in places. There is some appropriate use of specialist terminology.</td> <td data-bbox="1147 1352 1267 1384">6–4</td> </tr> <tr> <td data-bbox="378 1538 477 1570">1</td> <td data-bbox="481 1538 1142 1666">Knowledge split brain research is either limited or very limited. The answer lacks clarity and is poorly organised. Specialist terminology is either absent or inappropriately used.</td> <td data-bbox="1147 1538 1267 1570">3–1</td> </tr> <tr> <td data-bbox="378 1680 477 1711">0</td> <td data-bbox="481 1680 1142 1711">No creditable content.</td> <td data-bbox="1147 1680 1267 1711"></td> </tr> </tbody> </table> | Level | Description | Marks | 3 | Knowledge of split brain research is accurate and detailed. The answer is clear and organised. There is some effective use of specialist terminology. | 9–7 | 2 | Knowledge of split brain research is evident but there are occasional inaccuracies/omissions. The answer lacks clarity and organisation in places. There is some appropriate use of specialist terminology. | 6–4 | 1 | Knowledge split brain research is either limited or very limited. The answer lacks clarity and is poorly organised. Specialist terminology is either absent or inappropriately used. | 3–1 | 0 | No creditable content. | | 9 |
| Level | Description | Marks | | | | | | | | | | | | | | | | |
| 3 | Knowledge of split brain research is accurate and detailed. The answer is clear and organised. There is some effective use of specialist terminology. | 9–7 | | | | | | | | | | | | | | | | |
| 2 | Knowledge of split brain research is evident but there are occasional inaccuracies/omissions. The answer lacks clarity and organisation in places. There is some appropriate use of specialist terminology. | 6–4 | | | | | | | | | | | | | | | | |
| 1 | Knowledge split brain research is either limited or very limited. The answer lacks clarity and is poorly organised. Specialist terminology is either absent or inappropriately used. | 3–1 | | | | | | | | | | | | | | | | |
| 0 | No creditable content. | | | | | | | | | | | | | | | | | |
| | | | AO1=9 | | | | | | | | | | | | | | | |

Section B: Development

Total for this section: 30 marks

| Question | Part | Marking guidance | Total marks | | | | | | | | | | | | | |
|----------|------------------------|---|-------------|---|-------------|-------|---|---|-----|---|---|-----|---|------------------------|--|-------|
| 06 | | <p>Outline the procedure involved in the Sally-Anne studies of theory of mind.</p> <p>Content:</p> <ul style="list-style-type: none"> • Children are shown two dolls, Sally and Anne. • They watch Sally place a marble in basket and go for a walk. • They see Anne take the marble and put it in a box. • They see Sally come back. • Children are then asked 'Where will Sally look for the marble?' | 4 | | | | | | | | | | | | | |
| | | <table border="1"> <thead> <tr> <th>Level</th> <th>Description</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>Outline of procedure is clear and detailed.</td> <td>4–3</td> </tr> <tr> <td>1</td> <td>Outline of procedure is limited/vague/muddled.</td> <td>2–1</td> </tr> <tr> <td>0</td> <td>No creditable content.</td> <td></td> </tr> </tbody> </table> | | Level | Description | Marks | 2 | Outline of procedure is clear and detailed. | 4–3 | 1 | Outline of procedure is limited/vague/muddled. | 2–1 | 0 | No creditable content. | | AO1=4 |
| | | Level | | Description | Marks | | | | | | | | | | | |
| | | 2 | | Outline of procedure is clear and detailed. | 4–3 | | | | | | | | | | | |
| | | 1 | | Outline of procedure is limited/vague/muddled. | 2–1 | | | | | | | | | | | |
| 0 | No creditable content. | | | | | | | | | | | | | | | |
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| 07 | | <p>A psychologist carried out an experiment to investigate scaffolding. She used two groups of children. All children were given the same problem to solve. Each child in Group A solved the problem alone. Each child in Group B was given scaffolding by an older child as they solved the problem.</p> <p>Interpret the findings in Table 1. Refer to scaffolding in your answer.</p> <p>Interpretation and application:</p> <ul style="list-style-type: none"> • Table shows that children in Group A find the problem much harder than those in Group B (or vice versa). • Nearly all the children in Group A answer incorrectly whereas most of those in Group B answer correctly. • Figures suggest that scaffolding has a beneficial effect on problem-solving. • Children in Group B benefit from the assistance of their more knowledgeable peers. • Scaffolding techniques such as preparation, demonstration, indication, verbal prompting etc have helped the children in Group B. | 6 | | | | | | | | | | | | | |
| | | <table border="1"> <thead> <tr> <th>Level</th> <th>Description</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>Interpretation and application are detailed and appropriate. The answer is clear.</td> <td>6–5</td> </tr> <tr> <td>2</td> <td>There is some appropriate interpretation but application in relation to scaffolding is limited. The answer lacks clarity in places.</td> <td>4–3</td> </tr> </tbody> </table> | | Level | Description | Marks | 3 | Interpretation and application are detailed and appropriate. The answer is clear. | 6–5 | 2 | There is some appropriate interpretation but application in relation to scaffolding is limited. The answer lacks clarity in places. | 4–3 | | | | |
| | | Level | | Description | Marks | | | | | | | | | | | |
| | | 3 | | Interpretation and application are detailed and appropriate. The answer is clear. | 6–5 | | | | | | | | | | | |
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| Question | Part | Marking guidance | | Total marks |
|----------|------|---|---|-------------|
| 07 | | 1 | Interpretation is very limited. There is little or no relevant application to scaffolding. The answer is vague/muddled. | 2-1 |
| | | 0 | No creditable content. | |
| 08 | | <p>Fatima is a teacher. In some lessons she gives the children practical problems to solve and encourages the children to find out the answers for themselves. She thinks that young children can sometimes learn better that way.</p> <p>Describe and evaluate Piaget’s theory of cognitive development. Briefly refer to Fatima’s lessons in your answer.</p> <p>Content:</p> <ul style="list-style-type: none"> • Piaget’s theory – innate cognitive structures developed through experience. • Piaget’s concepts related to schema development – assimilation, accommodation, adaptation. • Piaget’s stages: sensorimotor, pre-operational, concrete operational, formal operational. • Characteristics of the stages: object permanence, egocentrism, conservation. • Piaget’s views on importance of discovery learning – child as scientist, ‘action on the world’. • Knowledge of Piaget’s research, eg conservation experiment, 3 mountains experiment. <p>Application:</p> <ul style="list-style-type: none"> • Fatima expects children to learn through discovery learning. • She gives children the materials and waits for them to come up with their own answer rather than telling them the answer. <p>Evaluation:</p> <ul style="list-style-type: none"> • Criticism of stages as too fixed/rigid. • Piaget underestimated children’s abilities because he assumed lack of performance was the same as lack of ability. • Piaget’s studies were artificial and so children did not understand what they were expected to do, eg conservation studies he asked the same question twice. • Use of evidence to support/contradict the theory eg alternative findings. • Comparison with other theories. • Importance of Piaget’s work – effect on other theorists and effect on educational practice. <p>Credit other relevant content.</p> | | 20 |

| Question | Part | Marking guidance | Total marks | | | | | | | | | | | | | | | | | | |
|----------|---|---|-------------|-------------|-------|---|--|-------|---|--|-------|---|--|------|---|---|-----|---|------------------------|--|---|
| 08 | | <table border="1"> <thead> <tr> <th>Level</th> <th>Description</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>Knowledge of Piaget's theory is mostly accurate and generally well detailed. Evaluation is mostly effective. Application is appropriate. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear and focused. Specialist terminology is mostly used effectively.</td> <td>20–16</td> </tr> <tr> <td>3</td> <td>Knowledge of Piaget's theory is evident but there are occasional inaccuracies/omissions. There is some effective evaluation. There is some attempt at application. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is mostly used appropriately.</td> <td>15–11</td> </tr> <tr> <td>2</td> <td>Limited knowledge of Piaget's theory is present. Any evaluation/application is of limited effectiveness. The answer lacks clarity, accuracy and organisation. Specialist terminology is occasionally used appropriately.</td> <td>10–6</td> </tr> <tr> <td>1</td> <td>Knowledge of Piaget's theory is very limited. Evaluation/application is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.</td> <td>5–1</td> </tr> <tr> <td>0</td> <td>No creditable content.</td> <td></td> </tr> </tbody> </table> | Level | Description | Marks | 4 | Knowledge of Piaget's theory is mostly accurate and generally well detailed. Evaluation is mostly effective. Application is appropriate. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear and focused. Specialist terminology is mostly used effectively. | 20–16 | 3 | Knowledge of Piaget's theory is evident but there are occasional inaccuracies/omissions. There is some effective evaluation. There is some attempt at application. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is mostly used appropriately. | 15–11 | 2 | Limited knowledge of Piaget's theory is present. Any evaluation/application is of limited effectiveness. The answer lacks clarity, accuracy and organisation. Specialist terminology is occasionally used appropriately. | 10–6 | 1 | Knowledge of Piaget's theory is very limited. Evaluation/application is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used. | 5–1 | 0 | No creditable content. | | AO3=10 AO2=2 AO1=8 |
| | Level | Description | Marks | | | | | | | | | | | | | | | | | | |
| | 4 | Knowledge of Piaget's theory is mostly accurate and generally well detailed. Evaluation is mostly effective. Application is appropriate. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear and focused. Specialist terminology is mostly used effectively. | 20–16 | | | | | | | | | | | | | | | | | | |
| | 3 | Knowledge of Piaget's theory is evident but there are occasional inaccuracies/omissions. There is some effective evaluation. There is some attempt at application. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is mostly used appropriately. | 15–11 | | | | | | | | | | | | | | | | | | |
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| 0 | No creditable content. | | | | | | | | | | | | | | | | | | | | |

Section C: Research methods 1

Total for this section: 30 marks

| Question | Part | Marking guidance | Total marks |
|----------|------|---|--------------|
| 09 | | <p>Calculate the mean language ability score and the range for boys. Show your workings.</p> <p>In each case, award marks as follows:</p> <p>2 marks for correctly calculated mean/range</p> <p>1 mark if the answer is incorrect but there are some appropriate calculations eg</p> <p>For the mean: scores are added correctly or if an incorrect total is divided correctly.</p> <p>For the range: some appropriate procedure eg figures show highest score minus lowest score but result is wrong.</p> <p>Boys' mean = 55.5</p> <p>Boys' range = 54(86–32)</p> | 4 |
| | | | AO2=4 |

| Question | Part | Marking guidance | Total marks | | | | | | | | | | | | |
|----------|---|--|-----------------------|-------------|-------|---|--|-----|---|---|-----|---|------------------------|--|---|
| 10 | | <p>Explain why the psychologist chose to calculate the means and ranges in this study rather than just consider the individual scores.</p> <p>Content:</p> <ul style="list-style-type: none"> Looking at individual language scores does not inform about an overall pattern or effect. Mean (measure of central tendency or average) describes overall language performance of each group and enables sensible comparisons about language ability between the two groups Ranges show how much the language scores within a group are spread out, enabling psychologist to see variability in performance within each group <p>These descriptive statistics enable the psychologist to draw overall conclusions eg about differences between boys' and girls' language ability and how consistent or otherwise the performances are within each group.</p> <table border="1" data-bbox="370 902 1275 1384"> <thead> <tr> <th>Level</th> <th>Description</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>Explanation is clear and detailed with appropriate reference to the usefulness and purposes of the means and ranges in this case. The answer is clear with appropriate use of terminology.</td> <td>4–3</td> </tr> <tr> <td>1</td> <td>Explanation of the usefulness of the means/ranges is limited, vague or muddled. The answer lacks clarity. A clear detailed answer focussing on just the mean or just the range can score up to 2 marks.</td> <td>2–1</td> </tr> <tr> <td>0</td> <td>No creditable content.</td> <td></td> </tr> </tbody> </table> | Level | Description | Marks | 2 | Explanation is clear and detailed with appropriate reference to the usefulness and purposes of the means and ranges in this case. The answer is clear with appropriate use of terminology. | 4–3 | 1 | Explanation of the usefulness of the means/ranges is limited, vague or muddled. The answer lacks clarity. A clear detailed answer focussing on just the mean or just the range can score up to 2 marks. | 2–1 | 0 | No creditable content. | | 4 AO2=4 |
| Level | Description | Marks | | | | | | | | | | | | | |
| 2 | Explanation is clear and detailed with appropriate reference to the usefulness and purposes of the means and ranges in this case. The answer is clear with appropriate use of terminology. | 4–3 | | | | | | | | | | | | | |
| 1 | Explanation of the usefulness of the means/ranges is limited, vague or muddled. The answer lacks clarity. A clear detailed answer focussing on just the mean or just the range can score up to 2 marks. | 2–1 | | | | | | | | | | | | | |
| 0 | No creditable content. | | | | | | | | | | | | | | |
| 11 | | <p>What is the independent variable (IV) in this study?</p> <p>Answer = C (Sex of participant).</p> | 1 AO2=1 | | | | | | | | | | | | |
| 12 | | <p>What is the operationalised dependent variable (DV) in this study</p> <p>Answer = B (Language test score).</p> | 1 AO2=1 | | | | | | | | | | | | |

| Question | Part | Marking guidance | Total marks | | | | | | | | | | | | |
|----------|---|---|-------------|-------------|-------|---|---|-----|---|---|-----|---|------------------------|--|-------------------------------------|
| 13 | | <p>The children’s own teacher selected them to take part in the study. Explain one problem with selecting the children in this way.</p> <p>Possible content includes:</p> <ul style="list-style-type: none"> • Teacher may have been biased so the results would be affected. • Teacher may have chosen the children according to what he or she expected, eg clever girls and less able boys. • This means the results are less valid, ie do not show a real difference in boys’ and girls’ ability. • This means that the results/findings cannot be generalised. <table border="1" data-bbox="371 696 1275 1003"> <thead> <tr> <th>Level</th> <th>Description</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>A relevant problem is explained in some detail. The answer is clear with appropriate use of terminology.</td> <td>4–3</td> </tr> <tr> <td>1</td> <td>Explanation of a problem is limited, vague or muddled. The answer lacks clarity.</td> <td>2–1</td> </tr> <tr> <td>0</td> <td>No creditable content.</td> <td></td> </tr> </tbody> </table> | Level | Description | Marks | 2 | A relevant problem is explained in some detail. The answer is clear with appropriate use of terminology. | 4–3 | 1 | Explanation of a problem is limited, vague or muddled. The answer lacks clarity. | 2–1 | 0 | No creditable content. | | <p>4</p> <p>AO3=4</p> |
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| 0 | No creditable content. | | | | | | | | | | | | | | |
| 14 | | <p>Explain how the psychologist could have used random sampling in this study.</p> <p>Possible content includes:</p> <ul style="list-style-type: none"> • Each boy/girl in the school is given/assigned a number. • 10 numbers are selected at random (either from a hat or using a random number generating system on a computer/calculator). • Same procedure is followed for the girls/boys. • So, all children have an equal chance of being chosen to take part. <p>Credit other procedures that would result in a random sample.</p> <table border="1" data-bbox="371 1536 1275 1899"> <thead> <tr> <th>Level</th> <th>Description</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>A way of achieving a random sample of boys and a random sample of girls is explained in some detail. The answer is clear with appropriate use of terminology.</td> <td>4–3</td> </tr> <tr> <td>1</td> <td>The explanation of a way of achieving a random sample is limited, vague or muddled. The answer lacks clarity.</td> <td>2–1</td> </tr> <tr> <td>0</td> <td>No creditable content.</td> <td></td> </tr> </tbody> </table> | Level | Description | Marks | 2 | A way of achieving a random sample of boys and a random sample of girls is explained in some detail. The answer is clear with appropriate use of terminology. | 4–3 | 1 | The explanation of a way of achieving a random sample is limited, vague or muddled. The answer lacks clarity. | 2–1 | 0 | No creditable content. | | <p>4</p> <p>AO2=4</p> |
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| Question | Part | Marking guidance | Total marks | | | | | | | | | | | | | | | |
|----------|--|---|-------------|-------------|-------|---|--|---|---|---|---|---|---|---|---|------------------------|--|---|
| 15 | | <p>Explain two ethical issues that the psychologist should have considered in this study.</p> <p>Possible ethical issues include:</p> <ul style="list-style-type: none"> • Consent – it would be necessary to gain informed consent from parents (and the children themselves); informed consent means the parents would have to be told the children will be taking a language ability test and why. • Confidentiality – it would be important to keep the results confidential; not to publish any child's individual score; not to discuss any child's individual score with anyone else eg teacher at the school. • Protection from harm – it would be important to make sure that no child is upset during or after the study; if a child gets upset doing the test then they should not continue; no child should be told their score is 'poor' as that would make them feel bad. <p>Credit other relevant ethical issues applied to this study.</p> <p>For each issue award marks as follows:</p> <table border="1" data-bbox="368 958 1275 1352"> <thead> <tr> <th>Level</th> <th>Description</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>Explanation is detailed and appropriately applied to the study. The answer is clear with appropriate use of terminology.</td> <td>3</td> </tr> <tr> <td>2</td> <td>Explanation is relevant to the study but detail/application is lacking. The answer lacks clarity in places.</td> <td>2</td> </tr> <tr> <td>1</td> <td>Explanation is limited, vague or muddled.</td> <td>1</td> </tr> <tr> <td>0</td> <td>No creditable content.</td> <td></td> </tr> </tbody> </table> | Level | Description | Marks | 3 | Explanation is detailed and appropriately applied to the study. The answer is clear with appropriate use of terminology. | 3 | 2 | Explanation is relevant to the study but detail/application is lacking. The answer lacks clarity in places. | 2 | 1 | Explanation is limited, vague or muddled. | 1 | 0 | No creditable content. | | 6 |
| Level | Description | Marks | | | | | | | | | | | | | | | | |
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| 1 | Explanation is limited, vague or muddled. | 1 | | | | | | | | | | | | | | | | |
| 0 | No creditable content. | | | | | | | | | | | | | | | | | |

AO2=6

| Question | Part | Marking guidance | Total marks | | | | | | | | | | | | | | | |
|----------|--|---|---|-------------|-------|---|---|-----|---|--|-----|---|--|-----|---|------------------------|--|---|
| 16 | | <p>The psychologist decided to carry out an unstructured interview with one of the boys, who scored very highly on the test.</p> <p>Discuss how carrying out an unstructured interview might lead to useful additional information in this case.</p> <p>Possible discussion/application:</p> <ul style="list-style-type: none"> • The test score alone reveals only current language ability. • An unstructured interview would allow the psychologist to find out possible reasons for the high language test score. • The interviewer can pursue any interesting issues that arise eg if the boy mentions his parents. • Follow-up questions can be used, for example, to find out about the boy's family circumstances. • For example, the boy may live in a house where there are lots of books etc. <p>Credit other relevant points.</p> <table border="1"> <thead> <tr> <th>Level</th> <th>Description</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>Discussion is detailed and application to the scenario is appropriate. The answer is clear.</td> <td>6–5</td> </tr> <tr> <td>2</td> <td>There is some appropriate discussion and/or application but detail is lacking. The answer lacks clarity in places.</td> <td>4–3</td> </tr> <tr> <td>1</td> <td>Discussion/application is very limited. The answer is vague/muddled.</td> <td>2–1</td> </tr> <tr> <td>0</td> <td>No creditable content.</td> <td></td> </tr> </tbody> </table> | Level | Description | Marks | 3 | Discussion is detailed and application to the scenario is appropriate. The answer is clear. | 6–5 | 2 | There is some appropriate discussion and/or application but detail is lacking. The answer lacks clarity in places. | 4–3 | 1 | Discussion/application is very limited. The answer is vague/muddled. | 2–1 | 0 | No creditable content. | | 6 |
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| 0 | No creditable content. | | | | | | | | | | | | | | | | | |
| | | | <p>AO3=2</p> <p>AO2=4</p> | | | | | | | | | | | | | | | |

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