

# INTERNATIONAL A-LEVEL PSYCHOLOGY

## PS03

Unit 3 Advanced Topics and Research Methods 2

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Mark scheme

January 2024

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Version: 1.0 Final



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 Examiner.

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.

Further copies of this mark scheme are available from [oxfordaqaexams.org.uk](https://oxfordaqaexams.org.uk)

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## Level of response marking instructions

Level of response mark schemes are broken down into levels, each of which has a descriptor. The descriptor for the level shows the average performance for the level. There are marks in each level.

Before you apply the mark scheme to a student's answer read through the answer and annotate it (as instructed) to show the qualities that are being looked for. You can then apply the mark scheme.

### 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 descriptor for that level. The descriptor for the level indicates the different qualities that might be seen in the student's answer for that level. If it meets 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 descriptor and the answer. With practice and familiarity you will find that for better answers you will be able to quickly skip through the lower levels of the mark scheme.

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, ie if the response is predominantly level 3 with a small amount of level 4 material it would be placed in level 3 but be awarded a mark near the top of the level because of the level 4 content.

### Step 2 Determine a mark

Once you have assigned a level you need to decide on the mark. The descriptors on how to allocate marks can help with this. The exemplar materials used during standardisation will help. There will be an answer in the standardising materials which 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 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.

Indicative content in the mark scheme is provided as a guide for examiners. It is not intended to be exhaustive and you must credit other valid points. Students do not have to cover all of the points mentioned in the Indicative content to reach the highest level of the mark scheme.

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

## Section A: Psychology of Sleep

Total for this section: 30 marks

| Question | Marking Guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Total Marks                        |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| 01       | <p><b>Explain two differences between non-REM sleep and REM sleep.</b></p> <p><b>For each difference award marks as follows:</b><br/><b>2 marks</b> for a clear and explicit difference between non-REM and REM sleep.<br/><b>1 mark</b> for a muddled or vague difference between non-REM and REM sleep.</p> <p><b>Possible content</b></p> <ul style="list-style-type: none"><li>• There are four different stages of non-REM sleep whereas there are no distinct stages of REM sleep.</li><li>• The stages of non-REM sleep are characterised by regular patterns of electrical activity in the brain whereas REM sleep has no regular pattern of electrical activity in the brain.</li><li>• The stages of non-REM sleep give a synchronised EEG pattern whereas REM sleep gives a desynchronised EEG pattern.</li><li>• Major muscle paralysis occurs in REM sleep but does not occur in non-REM sleep.</li><li>• REM sleep is characterised by rapid eye movement which is not found in non-REM sleep.</li><li>• Adults spend a significantly longer amount of time in non-REM sleep (~75%) compared to REM sleep.</li></ul> <p>Credit other relevant material.</p> | <p><b>4</b><br/><b>AO3 = 4</b></p> |

|  |                                                                                                                                                                                                                                                                                                                                                                                            |  |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|  | <p>Imran has been having trouble sleeping for the past 2 months. Every night he lies in bed for several hours trying to fall asleep. When he finally does fall asleep, he wakes up regularly throughout the night. Imran feels tired during the day, struggles to complete his day job and often becomes angry at his work colleagues. Imran's doctor has diagnosed him with insomnia.</p> |  |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

| Question | Marking Guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Total Marks                         |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 02       | <p><b>Use your knowledge of three symptoms of insomnia to explain Imran's behaviour.</b></p> <p><b>For each symptom award marks as follows:</b><br/> <b>2 marks</b> for a clear symptom of insomnia that has been linked to Imran.<br/> <b>1 mark</b> for a muddled or vague symptom of insomnia.</p> <p><b>Possible content</b></p> <ul style="list-style-type: none"> <li>• The time taken for Imran to fall asleep (sleep onset latency) is very long as it takes him several hours to fall asleep.</li> <li>• The time Imran spends in bed asleep (sleep efficiency) is likely to be less than 85%.</li> <li>• Imran shows an increased number of night-time awakenings as he repeatedly wakes up during the night.</li> <li>• Imran has reoccurring (rather than one-off) symptoms of three or more times a week as he has been having issues every night for the past two months.</li> <li>• Imran is being affected in his daytime activities as he is struggling to complete his day job due to the tiredness.</li> <li>• Imran is being affected in other ways in his day-to-day life as he becomes angry with his work colleagues.</li> </ul> <p>Credit other relevant material.</p> | <p><b>6</b><br/> <b>AO2 = 6</b></p> |

| Question | Marking Guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Total Marks                                                   |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| 03       | <p><b>Describe and evaluate research into biological rhythms.</b></p> <p><b>Possible content</b></p> <ul style="list-style-type: none"> <li>• Circadian rhythms have a cycle that occurs once every 24 hours, eg the sleep/wake cycle.</li> <li>• Infradian rhythms have a cycle length of more than 24 hours, eg human menstrual cycle.</li> <li>• Ultradian rhythms have a cycle length of less than 24 hours, eg stages of sleep.</li> <li>• Biological rhythms are controlled by endogenous pacemakers (eg SCN) and influenced by exogenous zeitgebers (eg day/night cycle).</li> <li>• Description of research studies into biological rhythms: Siffre (1975) underground cave study; Aschoff &amp; Wever (1976) underground bunker study; Russell et al. (1980) menstrual cycle study; Dement &amp; Kleitman (1957) stages of sleep research.</li> </ul> <p><b>Possible evaluation</b></p> <ul style="list-style-type: none"> <li>• Applications of research, eg an understanding of circadian rhythms can help people working shifts to cope better with the disruption which will improve health; research into stages of sleep can better our understanding of sleep disorders and how they could be treated; can also lead to better drug treatments if we understand when drugs have the optimum effects on the body.</li> <li>• Methodological issues with research studies, eg Siffre's study involved just one male participant and took place in an underground cave so the results cannot be generalised which might tell us little about overall natural human circadian rhythms; possibility of extraneous variables.</li> <li>• Much of the research into biological rhythms does not consider individual differences and instead tries to generalise the findings from studies to everyone.</li> <li>• Discussion of the influence of endogenous and exogenous factors and how both need to work in synchrony rather than independently to control our biological rhythms effectively.</li> <li>• Use of additional studies to either support or criticise any evidence presented as description.</li> </ul> <p>Credit other relevant material.</p> <p>Note: Studies must be used as part of an evaluation and not additional description.</p> | <p><b>20</b></p> <p><b>AO1 = 8</b></p> <p><b>AO3 = 12</b></p> |

|  | Level | Description                                                                                                                                                                                                                                                                       | Marks |  |
|--|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--|
|  | 4     | Knowledge of research into biological rhythms is mostly accurate and generally well detailed. Evaluation is mostly effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear and focused. Specialist terminology is mostly used effectively. | 16–20 |  |
|  | 3     | Knowledge of research into biological rhythms is evident but there are occasional inaccuracies/omissions. There is some effective evaluation. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is mostly used appropriately.         | 11–15 |  |
|  | 2     | Limited knowledge of research into biological rhythms is present. Any evaluation is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is occasionally used appropriately.                                           | 6–10  |  |
|  | 1     | Knowledge of research into biological rhythms is very limited. Evaluation 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.              | 1–5   |  |
|  | 0     | No creditable content.                                                                                                                                                                                                                                                            | 0     |  |

**Section B: Schizophrenia**

**Total for this section: 30 marks**

| Question | Marking Guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Total Marks                        |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| 04       | <p><b>Identify one positive symptom and one negative symptom of schizophrenia.</b></p> <p>Award <b>1 mark</b> for identifying one positive symptom of schizophrenia:</p> <ul style="list-style-type: none"> <li>• delusions</li> <li>• hallucinations</li> <li>• disordered thinking/thought insertion/withdrawal/broadcast.</li> </ul> <p><b>Plus</b></p> <p>Award <b>1 mark</b> for identifying one negative symptom of schizophrenia:</p> <ul style="list-style-type: none"> <li>• speech poverty</li> <li>• avolition</li> <li>• flattening of affect</li> <li>• lack of movement (catatonic behaviour).</li> </ul> <p>Credit any other relevant symptoms.</p> | <p><b>2</b><br/><b>AO1 = 2</b></p> |

|  |                                                                                                                                                                                                                                                                                        |  |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|  | <p><b>Kiera has been diagnosed with schizophrenia and suffers from both positive and negative symptoms.</b></p> <p><b>Kiera's doctor suggests using anti-psychotic drugs to help her manage her symptoms. Kiera is worried as she does not know how anti-psychotic drugs work.</b></p> |  |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

| Question | Marking Guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Total Marks |             |       |   |                                                                                                                                                                             |     |   |                                                                                                                                                                          |     |   |                        |   |                                    |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---|------------------------|---|------------------------------------|
| 05       | <p><b>Using your knowledge of anti-psychotic drugs, explain what the doctor could tell Kiera about anti-psychotic drugs as a possible therapy for her.</b></p> <p><b>Possible application</b></p> <ul style="list-style-type: none"> <li>The doctor might tell Kiera that typical anti-psychotics only reduce positive symptoms, but because Kiera has both positive and negative symptoms she should be given atypical anti-psychotics since these address both types of symptoms.</li> <li>The doctor could tell Kiera that atypical anti-psychotics (such as Clozapine and Risperidone) would work by blocking a variety of receptors in her brain, such as those for dopamine and serotonin. This would reduce the levels of activity of these neurotransmitters in her brain and should reduce the intensity of her symptoms.</li> <li>The doctor could also tell/warn Kiera that she might experience some possible side effects, such as confusion, weight gain, etc, after taking the anti-psychotic drugs.</li> </ul> <p>Credit other relevant material, such as reference to type of medication (eg tablets vs injectables).</p> <table border="1"> <thead> <tr> <th>Level</th><th>Description</th><th>Marks</th></tr> </thead> <tbody> <tr> <td>2</td><td>The application of knowledge of anti-psychotic drugs to Kiera's treatment is accurate with some detail. The answer is clear with appropriate use of specialist terminology.</td><td>3–4</td></tr> <tr> <td>1</td><td>The application of knowledge of anti-psychotic drugs to Kiera's treatment is limited, vague or muddled. Specialist terminology is either absent or inappropriately used.</td><td>1–2</td></tr> <tr> <td>0</td><td>No creditable content.</td><td>0</td></tr> </tbody> </table> | Level       | Description | Marks | 2 | The application of knowledge of anti-psychotic drugs to Kiera's treatment is accurate with some detail. The answer is clear with appropriate use of specialist terminology. | 3–4 | 1 | The application of knowledge of anti-psychotic drugs to Kiera's treatment is limited, vague or muddled. Specialist terminology is either absent or inappropriately used. | 1–2 | 0 | No creditable content. | 0 | <p><b>4</b><br/><b>AO2 = 4</b></p> |
| Level    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Marks       |             |       |   |                                                                                                                                                                             |     |   |                                                                                                                                                                          |     |   |                        |   |                                    |
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| 0        | No creditable content.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 0           |             |       |   |                                                                                                                                                                             |     |   |                                                                                                                                                                          |     |   |                        |   |                                    |

| Question | Marking Guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Total Marks |             |       |   |                                                                                                                                                |     |   |                                                                                                                                 |     |   |                                                                                                        |     |   |                        |   |                                       |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------|---|------------------------------------------------------------------------------------------------------------------------------------------------|-----|---|---------------------------------------------------------------------------------------------------------------------------------|-----|---|--------------------------------------------------------------------------------------------------------|-----|---|------------------------|---|---------------------------------------|
| 06       | <p><b>Describe the genetic explanation for schizophrenia.</b></p> <p><b>Possible content</b></p> <ul style="list-style-type: none"> <li>• Suggests that schizophrenia is caused by one or more candidate genes that are inherited and passed on from parents to offspring.</li> <li>• Candidate genes include COMT gene and C4 gene.</li> <li>• Researchers (Ripke et al, 2014) have suggested schizophrenia might involve up to 108 genes (polygenic) that all work together to cause the disorder.</li> <li>• The genetic explanation is often tested through the use of family studies, eg Gottesman (1991) found higher percentage risk of developing schizophrenia in relatives who were more closely genetically related, as well as using twin studies, eg Gottesman and Shields (1966) found higher concordance rates in MZ compared to DZ twins.</li> <li>• The genetic explanation also suggests a person inherits a genetic predisposition towards the disorder (diathesis) which then becomes activated via some environmental factor (stressor).</li> </ul> <p>Credit other relevant material.</p> <table border="1"> <thead> <tr> <th>Level</th><th>Description</th><th>Marks</th></tr> </thead> <tbody> <tr> <td>3</td><td>Description of the genetic explanation for schizophrenia is detailed and appropriate. The answer is clear with appropriate use of terminology.</td><td>5–6</td></tr> <tr> <td>2</td><td>Description of the genetic explanation for schizophrenia is relevant but detail is lacking. The answer lacks clarity in places.</td><td>3–4</td></tr> <tr> <td>1</td><td>Description of the genetic explanation for schizophrenia is very limited. The answer is vague/muddled.</td><td>1–2</td></tr> <tr> <td>0</td><td>No creditable content.</td><td>0</td></tr> </tbody> </table> | Level       | Description | Marks | 3 | Description of the genetic explanation for schizophrenia is detailed and appropriate. The answer is clear with appropriate use of terminology. | 5–6 | 2 | Description of the genetic explanation for schizophrenia is relevant but detail is lacking. The answer lacks clarity in places. | 3–4 | 1 | Description of the genetic explanation for schizophrenia is very limited. The answer is vague/muddled. | 1–2 | 0 | No creditable content. | 0 | <p><b>6</b></p> <p><b>AO1 = 6</b></p> |
| Level    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Marks       |             |       |   |                                                                                                                                                |     |   |                                                                                                                                 |     |   |                                                                                                        |     |   |                        |   |                                       |
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| 0        | No creditable content.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 0           |             |       |   |                                                                                                                                                |     |   |                                                                                                                                 |     |   |                                                                                                        |     |   |                        |   |                                       |

| Question | Marking Guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Total Marks |             |       |   |                                                                                                                                                         |     |   |                                                                                                                                          |     |   |                                                                                                                 |     |   |                        |   |                                    |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---|------------------------------------------------------------------------------------------------------------------------------------------|-----|---|-----------------------------------------------------------------------------------------------------------------|-----|---|------------------------|---|------------------------------------|
| 07       | <p><b>Evaluate the neural correlates explanation for schizophrenia.</b></p> <p><b>Possible evaluation</b></p> <ul style="list-style-type: none"> <li>• Use of supporting research, eg Plaze et al. (2011), Johnstone et al. (1976), Gur et al (2000), Ito et al (2012), Jibiki et al. (1991).</li> <li>• Supporting evidence from the use of anti-psychotic drugs which block dopamine receptors and help to reduce symptoms.</li> <li>• Oversimplification of the dopamine hypothesis. Many neurotransmitter systems interact and that the mapping of these cortical pathways needs further investigation.</li> <li>• Unreliable findings, eg Lewis (1990) reviewed 18 studies and found no significant link between enlarged ventricles and negative symptoms associated with schizophrenia.</li> <li>• A variety of brain mechanisms seem to be implicated in schizophrenia, but none are yet sufficiently understood to provide a causal link.</li> <li>• Issues to do with cause or consequence in terms of whether it is the change in neural activity/structures that causes schizophrenia, or development of schizophrenia results in changes to neural activity/structures.</li> <li>• The neural correlates explanation is reductionist as it tries to simplify the complex disorder of schizophrenia to a single cause such as high levels of dopamine.</li> </ul> <p>Credit other relevant material.</p> <table border="1"> <thead> <tr> <th>Level</th><th>Description</th><th>Marks</th></tr> </thead> <tbody> <tr> <td>3</td><td>Evaluation of the neural correlates explanation for schizophrenia is detailed and appropriate. The answer is clear with appropriate use of terminology.</td><td>5–6</td></tr> <tr> <td>2</td><td>Evaluation of the neural correlates explanation for schizophrenia is relevant but detail is lacking. The answer lacks clarity in places.</td><td>3–4</td></tr> <tr> <td>1</td><td>Evaluation of the neural correlates explanation for schizophrenia is very limited. The answer is vague/muddled.</td><td>1–2</td></tr> <tr> <td>0</td><td>No creditable content.</td><td>0</td></tr> </tbody> </table> | Level       | Description | Marks | 3 | Evaluation of the neural correlates explanation for schizophrenia is detailed and appropriate. The answer is clear with appropriate use of terminology. | 5–6 | 2 | Evaluation of the neural correlates explanation for schizophrenia is relevant but detail is lacking. The answer lacks clarity in places. | 3–4 | 1 | Evaluation of the neural correlates explanation for schizophrenia is very limited. The answer is vague/muddled. | 1–2 | 0 | No creditable content. | 0 | <p><b>6</b><br/><b>AO3 = 6</b></p> |
| Level    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Marks       |             |       |   |                                                                                                                                                         |     |   |                                                                                                                                          |     |   |                                                                                                                 |     |   |                        |   |                                    |
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| 0        | No creditable content.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 0           |             |       |   |                                                                                                                                                         |     |   |                                                                                                                                          |     |   |                                                                                                                 |     |   |                        |   |                                    |

| Question | Marking Guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Total Marks                                                  |
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| 08       | <p><b>Discuss cognitive therapy as a treatment for schizophrenia.</b></p> <p><b>Possible content</b></p> <ul style="list-style-type: none"> <li>• Cognitive therapy, including cognitive behavioural therapy (CBT), can be used to reduce the symptoms of schizophrenia and help to ease the severity of psychotic episodes.</li> <li>• Involves a number of sessions (5–20) with a therapist over the course of several months.</li> <li>• Involves identifying irrational beliefs.</li> <li>• Therapist helps the person to challenge their irrational beliefs and uses reality testing to reduce distress.</li> <li>• CBT can be used to help overcome irrational thinking.</li> <li>• Use of positive self-talk.</li> <li>• Use of homework ‘diaries’ for the person to complete between therapy sessions.</li> <li>• Coping strategy enhancement through education and symptom targeting.</li> <li>• Cognitive restructuring via Ellis’ ABCDE framework. Identifying activating event (A), exploring beliefs (B), recognising consequences (C), disputing irrational beliefs (D) and restructured belief (E).</li> <li>• Credit description of appropriate studies into cognitive therapy as a treatment for schizophrenia.</li> </ul> <p><b>Possible discussion</b></p> <ul style="list-style-type: none"> <li>• Use of supporting evidence, eg Morrison et al. (2014), Drury et al. (1996), Kuipers et al. (1997).</li> <li>• CBT requires self-awareness and willingness to engage with process which some people with schizophrenia lack.</li> <li>• Not all clients are suited to vigorous confrontation.</li> <li>• Not effective in treating all symptoms of schizophrenia and so not effective for all people with schizophrenia.</li> <li>• Requires a course of sessions which may lead to high drop-out rates, especially at times of severe psychotic episodes.</li> <li>• May not actually treat the symptoms of schizophrenia but teach clients strategies for dealing with symptoms (Trower et al, 2004).</li> <li>• CBT has been criticised for attempting to control clients’ thoughts which may interfere with an individual’s freedom of thought.</li> <li>• Comparison with other therapies, eg no side effects compared to drug therapy.</li> </ul> <p>Credit other relevant material.</p> | <p><b>12</b></p> <p><b>AO1 = 6</b></p> <p><b>AO3 = 6</b></p> |

|  |              |                                                                                                                                                                                                                                                      |              |
|--|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
|  | <b>Level</b> | <b>Description</b>                                                                                                                                                                                                                                   | <b>Marks</b> |
|  | <b>4</b>     | Discussion of cognitive therapy as a treatment for schizophrenia is mostly effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, organised and focused. Specialist terminology is mostly used effectively. | <b>10–12</b> |
|  | <b>3</b>     | There is some effective discussion of cognitive therapy as a treatment for schizophrenia. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is mostly used appropriately.                                | <b>7–9</b>   |
|  | <b>2</b>     | Discussion of cognitive therapy as a treatment for schizophrenia is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is occasionally used appropriately.                              | <b>4–6</b>   |
|  | <b>1</b>     | Discussion of cognitive therapy as a treatment for schizophrenia is limited and poorly focused. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used. | <b>1–3</b>   |
|  | <b>0</b>     | No creditable content.                                                                                                                                                                                                                               | <b>0</b>     |

Section C: Research Methods 2

Total for this section: 30 marks

|  |                                                                                                                                                                                                                                                                 |  |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|  | <b>Aya was referred to a psychologist. She had suffered damage to her brain following a car accident, which resulted in significant memory problems. The psychologist decided to carry out a case study to investigate the extent of Aya's memory problems.</b> |  |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

| Question  | Marking Guidance                                                                                                                                                                                                                                                                                                                                                                                                             | Total Marks                         |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| <b>09</b> | <p><b>Outline what is meant by a case study.</b></p> <p><b>Award marks as follows:</b><br/> <b>2 marks</b> for a clear outline of a case study.<br/> <b>1 mark</b> for a muddled or vague outline.</p> <p>A detailed study of a single individual, group of people, institution or event which is usually conducted over a period of time, using a variety of techniques/methods.</p> <p>Credit other relevant material.</p> | <p><b>2</b><br/> <b>AO1 = 2</b></p> |

| Question  | Marking Guidance                                                                                                                                                                                                                                                                                                                                                                                                                                | Total Marks                         |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| <b>10</b> | <p><b>Explain how the psychologist might ensure confidentiality in this case study.</b></p> <p><b>Award 1 mark for each of the following:</b></p> <ul style="list-style-type: none"> <li>• Ensure the identity of Aya is not disclosed when publishing the results of the study.</li> <li>• This could be done by anonymising/using a fake name (pseudonym)/using initials instead of Aya's name.</li> </ul> <p>Accept alternative wording.</p> | <p><b>2</b><br/> <b>AO2 = 2</b></p> |

|  |                                                                                                                                                                   |  |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|  | As part of the case study, the psychologist created a questionnaire for Aya's family to complete to investigate how her memory had been affected by the accident. |  |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

| Question | Marking Guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Total Marks  |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| 11       | <p>Write a suitable open question that the psychologist could include in the questionnaire.</p> <p><b>Award marks as follows:</b><br/><b>2 marks</b> for a clear and suitable open question.<br/><b>1 mark</b> for a muddled or vague open question.</p> <p><b>Possible content</b></p> <ul style="list-style-type: none"><li>• Explain some of the changes you have noticed with Aya's memory since her accident.</li><li>• Explain how Aya copes with her memory loss in her day-to-day life.</li><li>• Describe how Aya suffered her memory loss.</li></ul> <p>Credit other relevant open questions.</p> | 2<br>AO2 = 2 |

| Question | Marking Guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Total Marks |             |       |   |                                                                                                                                                                    |     |   |                                                                                                                                                                 |     |   |                        |   |                                    |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---|------------------------|---|------------------------------------|
| 12       | <p><b>Explain how the psychologist could test the face validity of the questionnaire.</b></p> <p><b>Possible content</b></p> <ul style="list-style-type: none"> <li>• Ask another psychologist/expert (or multiple) to read through the questions on the questionnaire that will be given to Aya's family.</li> <li>• Ask them to decide if they believe (on the face of it) the questions meet the aim of the questionnaire, investigating how Aya's memory has been affected.</li> <li>• If the other psychologist/expert believes the questionnaire measures how her memory had been affected by the accident then it would be said to have (face) validity.</li> </ul> <p>Credit other relevant material.</p> <table border="1"> <thead> <tr> <th>Level</th><th>Description</th><th>Marks</th></tr> </thead> <tbody> <tr> <td>2</td><td>The explanation of how the psychologist could test face validity is accurate with some detail. The answer is clear with appropriate use of specialist terminology.</td><td>3–4</td></tr> <tr> <td>1</td><td>The explanation of how the psychologist could test face validity is limited, vague or muddled. Specialist terminology is either absent or inappropriately used.</td><td>1–2</td></tr> <tr> <td>0</td><td>No creditable content.</td><td>0</td></tr> </tbody> </table> | Level       | Description | Marks | 2 | The explanation of how the psychologist could test face validity is accurate with some detail. The answer is clear with appropriate use of specialist terminology. | 3–4 | 1 | The explanation of how the psychologist could test face validity is limited, vague or muddled. Specialist terminology is either absent or inappropriately used. | 1–2 | 0 | No creditable content. | 0 | <p><b>4</b><br/><b>AO2 = 4</b></p> |
| Level    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Marks       |             |       |   |                                                                                                                                                                    |     |   |                                                                                                                                                                 |     |   |                        |   |                                    |
| 2        | The explanation of how the psychologist could test face validity is accurate with some detail. The answer is clear with appropriate use of specialist terminology.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 3–4         |             |       |   |                                                                                                                                                                    |     |   |                                                                                                                                                                 |     |   |                        |   |                                    |
| 1        | The explanation of how the psychologist could test face validity is limited, vague or muddled. Specialist terminology is either absent or inappropriately used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1–2         |             |       |   |                                                                                                                                                                    |     |   |                                                                                                                                                                 |     |   |                        |   |                                    |
| 0        | No creditable content.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0           |             |       |   |                                                                                                                                                                    |     |   |                                                                                                                                                                 |     |   |                        |   |                                    |

| Question | Marking Guidance                                                                                                                                         | Total Marks                        |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| 13       | <p><b>Which one of the following types of data is most often produced by open questions?</b></p> <p><b>Answer key:</b></p> <p><b>C – Qualitative</b></p> | <p><b>1</b><br/><b>AO1 = 1</b></p> |

| Question | Marking Guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Total Marks |             |       |   |                                                                                                                                                                      |     |   |                                                                                                                                                                      |     |   |                        |   |                                    |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---|------------------------|---|------------------------------------|
| 14       | <p><b>Briefly explain one strength and one limitation of case studies.</b></p> <p><b>Possible strengths</b></p> <ul style="list-style-type: none"> <li>• A lot of data (qualitative and quantitative) can be obtained which can give a researcher a detailed insight into the person/group they are studying.</li> <li>• Allows researchers to study issues that they may not be able to in any other way, eg effects of brain damage.</li> </ul> <p><b>Possible limitations</b></p> <ul style="list-style-type: none"> <li>• Generalisability issues as case studies involve individuals/very small samples (lack population validity).</li> <li>• Lack of replication as the cases are one-off and unique so reliability is difficult to assess.</li> <li>• Researchers can become too involved with the person/group they are studying which can lead to a loss of objectivity when gathering/analysing data.</li> </ul> <p>Credit other relevant strengths or limitations.</p> <table border="1"> <thead> <tr> <th>Level</th><th>Description</th><th>Marks</th></tr> </thead> <tbody> <tr> <td>2</td><td>The explanation of one strength and one limitation of case studies is accurate with some detail. The answer is clear with appropriate use of specialist terminology.</td><td>3–4</td></tr> <tr> <td>1</td><td>The explanation of one strength and/or one limitation of case studies is limited, vague or muddled. Specialist terminology is either absent or inappropriately used.</td><td>1–2</td></tr> <tr> <td>0</td><td>No creditable content.</td><td>0</td></tr> </tbody> </table> | Level       | Description | Marks | 2 | The explanation of one strength and one limitation of case studies is accurate with some detail. The answer is clear with appropriate use of specialist terminology. | 3–4 | 1 | The explanation of one strength and/or one limitation of case studies is limited, vague or muddled. Specialist terminology is either absent or inappropriately used. | 1–2 | 0 | No creditable content. | 0 | <p><b>4</b><br/><b>AO3 = 4</b></p> |
| Level    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Marks       |             |       |   |                                                                                                                                                                      |     |   |                                                                                                                                                                      |     |   |                        |   |                                    |
| 2        | The explanation of one strength and one limitation of case studies is accurate with some detail. The answer is clear with appropriate use of specialist terminology.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 3–4         |             |       |   |                                                                                                                                                                      |     |   |                                                                                                                                                                      |     |   |                        |   |                                    |
| 1        | The explanation of one strength and/or one limitation of case studies is limited, vague or muddled. Specialist terminology is either absent or inappropriately used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1–2         |             |       |   |                                                                                                                                                                      |     |   |                                                                                                                                                                      |     |   |                        |   |                                    |
| 0        | No creditable content.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 0           |             |       |   |                                                                                                                                                                      |     |   |                                                                                                                                                                      |     |   |                        |   |                                    |

| <p>The psychologist conducted a memory experiment with Aya.</p> <p>In the experiment, Aya took part in two conditions.</p> <p>Condition 1: Aya was given 1 minute to read a list of 20 words. She was then asked to immediately write down as many words as she could remember. This was a test of her short-term memory.</p> <p>Condition 2: Aya was given 1 minute to read a second list of 20 different words. After a 10-minute delay, Aya was asked to write down as many words as she could remember from this second list. This was a test of her long-term memory.</p> <p>The results of the psychologist’s experiment can be seen in Table 1 below.</p> <p>Table 1 Number of words out of 20 recalled in the memory experiment</p> <table><tr><th>Condition 1:<br/>Immediate recall</th><th>Condition 2:<br/>10-minute delay</th></tr><tr><td>14</td><td>1</td></tr></table> | Condition 1:<br>Immediate recall | Condition 2:<br>10-minute delay | 14 | 1 |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------------------------------|----|---|--|
| Condition 1:<br>Immediate recall                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Condition 2:<br>10-minute delay  |                                 |    |   |  |
| 14                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                |                                 |    |   |  |

| Question | Marking Guidance                                                                                                                                                                                                                                                                                                                                            | Total Marks                           |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| 15       | <p><b>Calculate the percentage number of words recalled in Condition 1 and in Condition 2.</b></p> <p>Award <b>1 mark</b> for each correctly calculated percentage.</p> <ul style="list-style-type: none"> <li>Condition 1 (Number of words recalled immediately): 70%</li> <li>Condition 2 (Number of words recalled after 10-minute delay): 5%</li> </ul> | <p><b>2</b></p> <p><b>AO2 = 2</b></p> |

| Question | Marking Guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Total Marks                         |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 16       | <p><b>Using the data in Table 1, suggest what the psychologist could conclude about Aya’s memory after her accident.</b></p> <p><b>Award marks as follows:</b><br/> <b>2 marks:</b> for a clear conclusion of what the results tell us about the memory problems experienced by Aya.<br/> <b>1 mark:</b> for a muddled or vague conclusion.</p> <p><b>Possible content</b></p> <ul style="list-style-type: none"> <li>• Aya has problems recalling information after a delay, suggesting problems with her long-term memory after the accident.</li> <li>• Aya’s immediate recall is good, suggesting that her short-term memory is not affected by the accident.</li> </ul> <p>Accept alternative wording.</p> | <p><b>2</b><br/> <b>AO2 = 2</b></p> |

| Question | Marking Guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Total Marks                         |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 17       | <p><b>Explain how the psychologist could use the test-retest method to assess the reliability of the results of this experiment.</b></p> <p><b>Award 1 mark for each of the following:</b></p> <ul style="list-style-type: none"> <li>• Carry out the same memory experiment again with Aya.</li> <li>• Compare the results from both memory experiments.</li> <li>• The psychologist should use a statistical test (correlation/scattergram) to check for similarities between the two sets of results.</li> <li>• If the results of both experiments are similar (significant result), then the results are reliable.</li> </ul> <p>Accept alternative wording.</p> | <p><b>4</b><br/> <b>AO2 = 4</b></p> |

| Question | Marking Guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Total Marks                         |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 18       | <p><b>The psychologist has already used questionnaires and conducted an experiment as part of Aya’s case study.</b></p> <p><b>Identify and explain how the psychologist could use one other method in Aya’s case study.</b></p> <p><b>Award 1 mark</b> for identifying another method to use with Aya.<br/> <b>Award a further 3 marks as follows:</b><br/> <b>3 marks:</b> The explanation of how another method could be used with Aya is detailed. The answer is clear with appropriate use of specialist terminology.<br/> <b>2 marks:</b> The explanation of how another method could be used with Aya lacks detail. The answer lacks clarity in places.<br/> <b>1 mark:</b> The explanation of how another method could be used with Aya is briefly presented. The answer is very limited/vague/muddled.</p> <p><b>Possible content</b></p> <ul style="list-style-type: none"> <li>• Interviews: the psychologist could interview Aya and/or her family about the accident and how it affects her life including her memory. This could be done as either a structured or unstructured interview.</li> <li>• Observations: the psychologist could observe Aya in her day-to-day life having identified behavioural categories beforehand and tallying every time she demonstrates one of these behaviours.</li> <li>• Content analysis: the psychologist could analyse any documentation Aya has such as diaries or medical records. During the content analysis the psychologist could try to identify certain themes, eg references to how Aya feels when struggling to recall information.</li> </ul> <p>Credit other relevant material.</p> <p>Note: if a candidate provides more than one method, read all of them and credit the best one.</p> | <p><b>4</b><br/> <b>AO2 = 4</b></p> |

|  |                                                                                               |  |
|--|-----------------------------------------------------------------------------------------------|--|
|  | After carrying out research, psychologists often write a scientific report about their study. |  |
|--|-----------------------------------------------------------------------------------------------|--|

| Question | Marking Guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Total Marks                         |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 19       | <p><b>Name one section included in a scientific report. Briefly explain what information would need to be included in the section you have named.</b></p> <p><b>Award 1 mark</b> for naming any section of a scientific report.<br/> <b>Award a further 2 marks as follows:</b><br/> <b>2 marks</b> for a clear explanation of what information a psychologist would include within that section of a scientific report.<br/> <b>1 mark</b> for a muddled or vague explanation of what information a psychologist would include within that section of a scientific report.</p> <p><b>Possible content</b></p> <ul style="list-style-type: none"> <li>• Abstract: a short summary of the major elements of the study. Includes the aims and hypotheses, method/procedure, results and conclusion(s) of the study.</li> <li>• Introduction: a literature review which includes details of related theories, concepts and studies that are related to the area being studied.</li> <li>• Method/Procedure: split into sections including the design, sample, materials and procedures. Should provide sufficient detail to enable another researcher to replicate the study if they wanted.</li> <li>• Results: a summary of the key findings from the study. Likely to include descriptive statistics (mean, median, mode, graphs, tables) and (inferential) statistics including their choice and results of a relevant statistical test.</li> <li>• Discussion: a summary of the key results in a written form. These are related back to the hypotheses. It would also include a critical analysis of the study and how these issues/limitations might be overcome in the future.</li> <li>• References: full details of all source material that the researcher used within their report such as books, journals, websites, etc. These are presented alphabetically and following an academic style.</li> </ul> <p>Accept alternative wording.</p> | <p><b>3</b><br/> <b>AO1 = 3</b></p> |

**PS03 grid**

|                   | AO1       | AO2       | AO3       | Total     |
|-------------------|-----------|-----------|-----------|-----------|
| <b>Section A</b>  |           |           |           |           |
| 01                |           |           | 4         | 4         |
| 02                |           | 6         |           | 6         |
| 03                | 8         |           | 12        | 20        |
| <b>Section B</b>  |           |           |           |           |
| 04                | 2         |           |           | 2         |
| 05                |           | 4         |           | 4         |
| 06                | 6         |           |           | 6         |
| 07                |           |           | 6         | 6         |
| 08                | 6         |           | 6         | 12        |
| <b>Section C</b>  |           |           |           |           |
| 09                | 2         |           |           | 2         |
| 10                |           | 2         |           | 2         |
| 11                |           | 2         |           | 2         |
| 12                |           | 4         |           | 4         |
| 13                | 1         |           |           | 1         |
| 14                |           |           | 4         | 4         |
| 15                |           | 2         |           | 2         |
| 16                |           | 2         |           | 2         |
| 17                |           | 4         |           | 4         |
| 18                |           | 4         |           | 4         |
| 19                | 3         |           |           | 3         |
| <b>Unit total</b> | <b>28</b> | <b>30</b> | <b>32</b> | <b>90</b> |