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

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

Further copies of this mark scheme are available from aqa.org.uk
Level of response marking instructions

Level of response mark schemes are broken down into two, three or four levels, each of which has a descriptor. The descriptor for the level shows the average performance for the level. There are two, three or four 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 does not contain anything of relevance to the question must be awarded no marks.

Examiners are required to assign each of the students’ responses to the most appropriate level according to its overall quality, then allocate a single mark within the level. When deciding upon a mark in a level examiners should bear in mind the relative weightings of the assessment objectives (included for each question and summarised on page 14) and be careful not to over/under credit a particular skill. For example, in question 08 more weight should be given to AO1 than to AO2 and AO3, whereas in question 12 equal weight should be given AO1 and AO3. This will be exemplified and reinforced as part of examiner training and standardisation.
Section A
Social influence

01 Which two of the following statements about Zimbardo’s prison study are correct? Shade two boxes only. [2 marks]

Marks for this question: AO1 = 2
A and E

02 Many people have criticised Zimbardo’s prison study.
Identify and briefly discuss two reasons why people have criticised Zimbardo’s prison study. [6 marks]

Marks for this question: AO1 = 2 and AO3 = 4

<table>
<thead>
<tr>
<th>Level</th>
<th>Marks</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>5–6</td>
<td>Two criticisms are clearly identified. There is some clear and effective discussion of each criticism. The answer is coherent and well organised, with effective use of specialist terminology.</td>
</tr>
<tr>
<td>2</td>
<td>3–4</td>
<td>Two criticisms are identified. There is some discussion of each but it is limited. The answer is mostly clear and organised, with appropriate use of specialist terminology. OR One criticism is presented at top of Level 3</td>
</tr>
<tr>
<td>1</td>
<td>1–2</td>
<td>Criticism(s) are muddled but can be inferred. Discussion is absent/very limited. Specialist terminology is either absent or inappropriately used. OR One criticism is presented at Level 2</td>
</tr>
<tr>
<td>0</td>
<td></td>
<td>No relevant content.</td>
</tr>
</tbody>
</table>

Possible criticisms:
- Ethics – psychological harm – participants soon became distressed
- Zimbardo himself took part in the action/was a participant observer.

Possible discussion points:
- whether or not the distress should have been anticipated
- whether or not the consent gained was sufficiently informed
- Zimbardo’s own behaviour affected the way in which events unfolded, thus the validity of the findings could be questioned
- use of examples from the study to support argument and elaborate on the criticisms given.

Credit other valid criticisms and other valid discussion points. Can credit two separate ethical criticisms.
Social influence research helps us to understand how it is possible to change people's behaviour: for example, understanding how to persuade people to eat more healthily.

With reference to this example of social change, explain how psychology might affect the economy.

Marks for this question: AO2 = 4

<table>
<thead>
<tr>
<th>Level</th>
<th>Marks</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3–4</td>
<td>Explanation of how psychology/social influence research might affect the economy is clear. There is effective application to the example of eating healthily. The answer is generally coherent with effective use of terminology.</td>
</tr>
<tr>
<td>1</td>
<td>1–2</td>
<td>There is limited/partial explanation of how psychology/social influence research might affect the economy. There is limited application to the example of eating healthily. The answer lacks coherence. Use of terminology is either absent or appropriate.</td>
</tr>
<tr>
<td>0</td>
<td></td>
<td>No relevant content.</td>
</tr>
</tbody>
</table>

Possible content:
- Social influence research tells us how behaviour and attitudes can be changed: eg how minority influence can be exerted or how people tend to conform to perceived norms (or reference to any other relevant social influence process)
- In this case, the resulting change of eating more healthily means that people should be more healthy
- Economic implication: eg saves health service/care resources; means less time off work sick

Credit other relevant information.
Discuss two explanations for conformity. Refer to Polly and Jed in your discussion.

[12 marks]

Marks for this question: AO1 = 6, AO2 = 2 and AO3 = 4

<table>
<thead>
<tr>
<th>Level</th>
<th>Marks</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>10–12</td>
<td>Knowledge of two explanations for conformity is accurate and generally well detailed. Discussion is mostly effective. Application to the stem is appropriate with clear links between the explanations and the stem content. The answer is clear, coherent and focused. Specialist terminology is used effectively. Minor detail and/or expansion sometimes lacking.</td>
</tr>
<tr>
<td>3</td>
<td>7–9</td>
<td>Knowledge of two explanations for conformity is evident. Discussion is apparent and mostly effective. There are occasional inaccuracies. Application to the stem is appropriate although links to explanations are limited/absent. The answer is mostly clear and organised. Specialist terminology is mostly used appropriately. Lacks focus in places.</td>
</tr>
<tr>
<td>2</td>
<td>4–6</td>
<td>Knowledge of two explanations is present. Focus is mainly on description. Any discussion is of limited effectiveness. Any application to the stem is partial. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions. OR one explanation answered at Level 3 or 4.</td>
</tr>
<tr>
<td>1</td>
<td>1–3</td>
<td>Knowledge of explanation(s) is (are) limited. Discussion/application is very 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. OR one explanation answered at Level 2.</td>
</tr>
<tr>
<td>0</td>
<td></td>
<td>No relevant content.</td>
</tr>
</tbody>
</table>

Possible content:
- Normative social influence occurs where people conform so as to be part of the majority and not stand out.
- Normative social influence often (although not always) results in compliance or superficial change in behaviour.
- Informational social influence occurs when people conform because they are not sure how to behave so use the majority as a source of information.
- Informational social influence often results in internalisation – adopting the views and behaviours of the majority.

Possible discussion points:
- Informational social influence tends to have a more permanent effect whereas normative is transient.
- Use of research evidence to support discussion: eg different conditions of the Asch study to illustrate normative and informational social influence.
- Overlap between the effects of the two types of social influence; we often look to others for information, but partly because we do not want to be different.

Possible applications:
- Polly’s change in behaviour is due to normative social influence because she is wanting to be the same as everyone else/be part of the norm
- Jed is using colleagues as a source of information – informational social influence – he will put his coat in the right place and take the appropriate amount of time for lunch

Credit other relevant evaluation points.
Section B
Memory

05 Figure 1 is a diagram of the working memory model. Write the name of each of the four components of working memory in the space provided. [4 marks]

Marks for this question: AO1 = 4

1 mark for naming each component correctly. The central executive will need to be in the correct position (top box) but the other three components can appear in any of the remaining boxes.

Accept also ‘phonological store’ and visuo-spatial scratchpad’ as alternatives.

06 Use your knowledge of the multi-store model of memory to explain the purpose of this research and the likely outcome. [4 marks]

Marks for this question: AO2 = 4

1 mark for each valid point as follows:
- **purpose** is to test the capacity of short-term memory
- short-term memories are coded verbally/acoustically/task requires verbal rehearsal
- **outcome** – most of the people tested would be able to repeat correctly a sequence of between 5 and 9 items
- because according to the multi-store model, short-term memory has a limited capacity of 7 + or - 2
Suggest one 4-letter sequence and one 5-letter sequence that the researcher could use. In the case of each sequence, give a justification for your choice. Use a different justification for each sequence.

[4 marks]

Marks for this question: AO3 = 4

1 mark for an appropriate 4-letter sequence (to be creditworthy, this sequence should not make up a word or a recognisable abbreviation of a word, be a recognisable acronym or include multiple repetitions, eg 'p,p,p,p')

Plus

1 mark for appropriate 5-letter sequence (to be creditworthy this sequence should not make up a word or a recognisable abbreviation of a word, be a recognisable acronym or include multiple repetitions eg 'p,p,p,p,p', have any similarity to/connection with the 4-letter sequence (eg partial repetition, rhyme with)

Plus

1 mark each for any two valid justification points: eg

- words – have meaning – can be recalled as wholes
- recognisable abbreviations – have meaning – can be recalled as wholes
- acronyms – have meaning – can be recalled as whole
- multiple repetitions – reduce cognitive demand
- rhyming letters – reduce cognitive demand

Do not accept the statement ‘letters must be random’ without further elaboration because random selection could, by chance, result in a word, acronym etc.
Discuss two explanations for forgetting. Refer to Martin’s experiences in your answer.

[12 marks]

Marks for this question: AO1 = 6, AO2 = 2 and AO3 = 4

<table>
<thead>
<tr>
<th>Level</th>
<th>Marks</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>10–12</td>
<td>Knowledge of two explanations for forgetting is accurate and generally well detailed. Discussion is mostly effective. Application to the stem is appropriate, with clear links between the explanations and the stem content. The answer is clear, coherent and focused. Specialist terminology is used effectively. Minor detail and/or expansion sometimes lacking.</td>
</tr>
<tr>
<td>3</td>
<td>7–9</td>
<td>Knowledge of two explanations for forgetting is evident. Discussion is apparent and mostly effective. There are occasional inaccuracies. Application to the stem is appropriate although links to explanations are limited/absent. The answer is mostly clear and organised. Specialist terminology is mostly used appropriately. Lacks focus in places.</td>
</tr>
<tr>
<td>2</td>
<td>4–6</td>
<td>Knowledge of two explanations is present. Focus is mainly on description. Any discussion is of limited effectiveness. Any application to the stem is partial. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions. OR one explanation answered at Level 3 or 4.</td>
</tr>
<tr>
<td>1</td>
<td>1–3</td>
<td>Knowledge of explanation(s) is (are) limited. Discussion/application is very 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. OR one explanation answered at Level 2.</td>
</tr>
<tr>
<td>0</td>
<td></td>
<td>No relevant content.</td>
</tr>
</tbody>
</table>

Possible Content:
- Interference is an explanation for forgetting – two sets of information become confused
- Proactive interference is where old learning prevents recall of more recent information
- Retroactive interference is where new learning prevents recall of previously learned information
- Retrieval failure is where information is available but cannot be recalled because of the absence of appropriate cues
- Types of cues that have been studied by psychologists include context, state and organisation
- Cues improve recall if recall is in same context as learning, if the person is in same bodily state as when material was learned, if the organisation gives a structure which provides triggers, eg categories.

Application:
- French and Spanish are similar types of material which makes interference more likely
- Recalling French word for ‘chair’ is proactive interference.
- Martin’s mum gives him cues (first letter) which can then be used for him to access the material he has failed to retrieve

Possible discussion:
- Use of evidence to support or contradict explanations
- Credit evaluation of evidence where used to discuss explanations
- Question of whether interference involves over-writing of other information
• Role of similarity in interference and response competition
• Issue of accessibility versus availability
• Semantic memory more resistant to interference than other types of memory
• General implications for revision and other situations
• Relevant links to memory theory: eg stage at which interference might occur in the multi-store model

Credit other relevant information.
09.1 Using the data in Table 1, explain the procedure used for the time sampling technique in this study.

Marks for this question: AO2 = 3

1 mark for each of the following points:

- The total observation time for each parent was 10 minutes.
- The psychologist made 20 observations for each parent.
- To generate 20 observations for each parent she must therefore have recorded her observation every ½ minute or every 30 seconds.

09.2 In what percentage of the total observations was the baby gazing at his mother? Show your calculations.

Marks for this question: AO2 = 2

1 mark for the correct answer: 30%

Plus

1 mark for showing correct workings: 12 divided by 40 multiplied by 100

09.3 Which one of the following types of data best describes the data collected in this study?

Shade one box only.

Marks for this question: AO2 = 1

1 mark for primary data

09.4 The study in Question 09 was an overt observation.

Explain what is meant by ‘overt observation’.

Marks for this question: AO1 = 2

1 mark for stating that overt observation is where the observer is clearly visible (not hidden from view)

Plus

1 mark for explanation – people being observed know that they are being observed
10 Outline the procedure used in one study of animal attachment

Marks for this question: AO1 = 4

<table>
<thead>
<tr>
<th>Level</th>
<th>Marks</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3–4</td>
<td>Outline of a relevant procedure is mostly clear, logically sequenced and coherent with some relevant detail of test conditions and apparatus/materials. Minor detail is sometimes lacking or there is slight inaccuracy. The answer as whole is clear with use of specialist terminology.</td>
</tr>
<tr>
<td>1</td>
<td>1–2</td>
<td>A relevant procedure is discernible although the outline lacks clarity, logical sequence and coherence. There is some relevant information in relation to test conditions, apparatus or materials. The answer as a whole lacks clarity and coherence. Specialist terminology is either absent or inappropriately used.</td>
</tr>
<tr>
<td>0</td>
<td></td>
<td>No relevant content.</td>
</tr>
</tbody>
</table>

Possible content:
- Harlow – wire and cloth mother research or any later variations
- Suomi and Harlow – therapist monkey research
- Lorenz – imprinting research with greylag geese

Credit other relevant research.

11 Briefly discuss one limitation of using animals to study attachment in humans.

Marks for this question: AO3 = 4

<table>
<thead>
<tr>
<th>Level</th>
<th>Marks</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3–4</td>
<td>A limitation is clearly presented and discussed in some detail. Links to the study of attachment are explicit. The answer as a whole is mostly clear and coherent with appropriate use of specialist terminology.</td>
</tr>
<tr>
<td>1</td>
<td>1–2</td>
<td>A limitation is identified although discussion is limited and lacks coherence. Links to the study of attachment are either obscure or absent. Specialist terminology is either absent or inappropriately used.</td>
</tr>
<tr>
<td>0</td>
<td></td>
<td>No relevant content.</td>
</tr>
</tbody>
</table>

Most likely limitations:
- Problems of extrapolation to attachment in human infants – what applies to non-human species may not also apply to human infants
- Difference in nature and complexity of the bond

Credit other relevant limitations.
Outline and evaluate Bowlby’s monotropic theory of attachment.

Marks for this question: AO1 = 4 and AO3 = 4

<table>
<thead>
<tr>
<th>Level</th>
<th>Marks</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>7-8</td>
<td>Knowledge of Bowlby’s monotropic theory of attachment is accurate and generally well detailed. Evaluation is effective. The answer is clear, coherent and focused on formation of attachment. Specialist terminology is used effectively. Minor detail and/or expansion of argument sometimes lacking.</td>
</tr>
<tr>
<td>3</td>
<td>5-6</td>
<td>Knowledge of Bowlby’s monotropic theory of attachment is evident. There are occasional inaccuracies. There is some effective evaluation. The answer is mostly clear and organised, with focus on formation of attachment. Specialist terminology mostly used effectively.</td>
</tr>
<tr>
<td>2</td>
<td>3-4</td>
<td>Knowledge of Bowlby’s monotropic theory of attachment is present. Focus is mainly on description. Any evaluation is of limited effectiveness. The answer lacks clarity, accuracy, organisation and focus in places. Specialist terminology used inappropriately on occasions.</td>
</tr>
<tr>
<td>1</td>
<td>1-2</td>
<td>Knowledge of Bowlby’s monotropic theory of attachment is limited. Evaluation is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology, either absent or inappropriately used.</td>
</tr>
<tr>
<td>0</td>
<td></td>
<td>No relevant content.</td>
</tr>
</tbody>
</table>

Possible outline:
- Infants have an innate drive to survive
- Babies seek proximity to carer (mother) for safety
- Sequence of development – non-focused, one or more, signalling, safe base behaviour
- Evolutionary explanation – security equals survival
- Monotropy – this attachment is to a single specific caregiver
- Babies use signals – social releasers to attract the carer-reciprocity
- There is a critical (sensitive) period for attachment to take place (approx. up to 2 years)

Possible evaluation points:
- Contrast with alternatives: eg learning theory states that attachment is based on reinforcement (cupboard love theory)
- Discussion in relation to continuity hypothesis
- Use of evidence to support Bowlby’s theory: eg animal evidence in favour of critical / sensitive period
- Use of contradictory evidence: eg Schaffer and Emerson’s findings re multiple attachments
- Implications (including economic implications) of monotropy theory: eg role of fathers, mothers returning to employment, use of daycare etc.
- Role of the internal working model

Credit other relevant information.
### Assessment Objective Grid

<table>
<thead>
<tr>
<th>Social influence</th>
<th>AO1</th>
<th>AO2</th>
<th>AO3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
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<td></td>
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</tr>
<tr>
<td>02</td>
<td>2</td>
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<td>4</td>
<td>6</td>
</tr>
<tr>
<td>03</td>
<td></td>
<td>4 RM</td>
<td></td>
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<tr>
<td>04</td>
<td>6</td>
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<tr>
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<table>
<thead>
<tr>
<th>Memory</th>
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<th>AO2</th>
<th>AO3</th>
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</thead>
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<td></td>
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</tr>
<tr>
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<td>4 (2 RM)</td>
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</tr>
<tr>
<td>07</td>
<td></td>
<td>4 RM</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>08</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>6</td>
<td>8</td>
<td>24</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attachment</th>
<th>AO1</th>
<th>AO2</th>
<th>AO3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>09.1</td>
<td></td>
<td>3 RM/Maths</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>09.2</td>
<td></td>
<td>2 RM/Maths</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>09.3</td>
<td></td>
<td>1 RM/Maths</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>09.4</td>
<td></td>
<td>2 RM</td>
<td></td>
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<td>8</td>
</tr>
<tr>
<td>Total</td>
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<td>6</td>
<td>8</td>
<td>24</td>
</tr>
</tbody>
</table>

| Paper Total | 30  | 18  | 24  | 72   |

Research methods (RM) = 20 marks  
Maths = 6 marks