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 18) and be careful not to over/under credit a particular skill. For example, in question 12.1 more weight should be given to AO3 than to AO1, whereas in question 11 equal weight should be given AO1 and AO3. This will be exemplified and reinforced as part of examiner training and standardisation.
Section A
Approaches in Psychology

01.1 Complete the following sentence. Shade one box only. [1 mark]

Marks for this question: AO1 = 1
C

01.2 Complete the following sentence. Shade one box only. [1 mark]

Marks for this question: AO1 = 1
B

02 Which one of the following responses results from the action of the sympathetic division of the autonomic nervous system? Shade one box only. [1 mark]

Marks for this question: AO1 = 1
C
03 Label the **two** areas of the synapse in **Figure 1** by putting the appropriate letter in each box.

[2 marks]

**Marks for this question: AO1 = 2**

**Figure 1: The synapse**

1 mark each for **D** and **E** in correct boxes.

04 Briefly suggest how **each** of these responses might inform psychologists investigating models of human cognitive processing.

[2 marks]

**Marks for this question: AO2 = 2**

1 mark for each relevant application as follows:

1 mark for response **A**: processing is limited capacity (when performing demanding/novel tasks)  
1 mark for response **B**: processing is sequential (when performing demanding/novel tasks).

Credit other relevant applications.
05.1 Explain which type of conditioning is being investigated in this experiment? [2 marks]

Marks for this question: AO2 = 2

1 mark for operant conditioning.

Plus

1 mark for an explanation of how this is operant conditioning, ie performance of desired response, pulling strings, results in a positive consequence, escape and treat.

05.2 Calculate the mean time taken for the cat to escape from the puzzle box. Show your calculations. [2 marks]

Marks for this question: AO2 = 2

2 marks for a correct answer 30.75 with workings (eg total time (246) divided by number of trials).
1 mark for correct answer without workings.
1 mark for partial workings (eg total time (246) divided by…) with incorrect answer.

05.3 The researcher compared the time taken for the cat to escape at the first attempt, with the time taken for the eighth attempt. He found that after learning had taken place the cat’s escape time was: Shade one box only. [1 mark]

Marks for this question: AO3 = 1

D
06.1 Outline what is meant by social learning theory and explain how social learning might have occurred in the procedure described above.

 Marks for this question: AO1 = 2 and AO2 = 4

<table>
<thead>
<tr>
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<th>Marks</th>
<th>Description</th>
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<tbody>
<tr>
<td>3</td>
<td>5-6</td>
<td>Outline of social learning is generally detailed, clear and coherent. Explanation of how social learning might have occurred in the procedure is thorough with aspects of social learning applied appropriately to the context. There is effective use of terminology.</td>
</tr>
<tr>
<td>2</td>
<td>3-4</td>
<td>Outline of social learning is mostly clear but some detail is missing. Explanation of how social learning might have occurred in the procedure is mostly sound and appropriate. There is some effective use of terminology.</td>
</tr>
<tr>
<td>1</td>
<td>1-2</td>
<td>Outline of social learning lacks detail and clarity. Explanation of how social learning might have occurred in the procedure is limited. Terminology is either minimal, absent or inappropriately used.</td>
</tr>
<tr>
<td>0</td>
<td></td>
<td>No relevant content.</td>
</tr>
</tbody>
</table>

Content – outline:
- learning that involves observation, imitation/copying/modelling, identification and vicarious reinforcement
- acknowledges role of cognition in learning, eg attention, motivation etc.

Possible applications:
- in the procedure children observed the actions of the boy in the film
- the psychologist exposed the children to a role model, the boy
- using role model/boy of the same age encouraged identification
- after exposure the children would model/imitate the boy’s behaviour, stroking the puppy
- the psychologist’s comments acted as vicarious reinforcement making learning more likely
- the learning might not be outwardly demonstrated but could still have been internalised (because this is social learning and therefore need not be overtly demonstrated at the time).

Credit other relevant applications.
06.2 Discuss two limitations of social learning theory. [6 marks]

Marks for this question: AO3 = 6

<table>
<thead>
<tr>
<th>Level</th>
<th>Marks</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>5–6</td>
<td>Discussion of two limitations is clear and effective. The answer is coherent and well organised with effective use of specialist terminology.</td>
</tr>
<tr>
<td>2</td>
<td>3–4</td>
<td>Discussion of two limitations is mostly effective although one or both lack explanation. The answer is mostly clear and organised, with appropriate use of specialist terminology. OR One limitation is discussed at top of Level 3.</td>
</tr>
<tr>
<td>1</td>
<td>1–2</td>
<td>At least one limitation is presented. Discussion lacks detail/explanation. Specialist terminology is either absent or inappropriately used. OR One limitation is discussed at Level 2.</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>No relevant content.</td>
</tr>
</tbody>
</table>

Limitations – possible content:
- difficulty demonstrating cause and effect – although Bandura research controlled variables and demonstrated behaviour was imitated it is difficult to show cause and effect in real life
- sees behaviour as environmentally determined whereas some behaviours may be innate
- mediating cognitive factors have to be inferred so cannot measure extent of their influence
- SLT does not explain cognitive processes, leaving this to cognitive psychologists
- can explain learning of outward behaviours, SLT is not so able to explain the learning of abstract notions, eg fairness, justice etc which cannot be observed directly
- credit comparison with other theories where presented in terms of a limitation.

Credit other relevant limitations.
Section B
Psychopathology

07.1 Distinguish between obsessions and compulsions. [2 marks]

Marks for this question: AO1 = 2

2 marks for a clear and coherent answer emphasising internal vs external distinction: obsessions are internal components because they are thoughts, and compulsions are external components because they are behaviours.

1 mark for a muddled or vague answer in which the distinction is suggested but is unclear or incomplete.

OR

1 mark for straightforward definition of each component (obsessions are intrusive thoughts, compulsions are repetitive behaviours/acts).
With reference to the study described above, what do the results seem to show about possible influences on the development of OCD?

 Marks for this question: AO2 = 4

<table>
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<th>Marks</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>2</td>
<td>3–4</td>
<td>Research findings are clearly explained in terms of both genetic and alternative explanation(s) and are mostly accurate. The answer is generally coherent with effective use of terminology.</td>
</tr>
<tr>
<td>1</td>
<td>1–2</td>
<td>Research findings are explained with some link to genetic and/or alternative explanation(s). The answer lacks accuracy and detail. Use of terminology is either absent or inappropriate.</td>
</tr>
<tr>
<td>0</td>
<td></td>
<td>No relevant content.</td>
</tr>
</tbody>
</table>

Content:
- results indicate development of OCD is at least partly genetic
- the findings suggest that heritability is high (between 45% and 65%)
- this means that there must also be other explanations (inherited influence is not 100%)
- so other factors (eg environment or other bio factors) may also partly account for OCD.

Outline one cognitive characteristic of OCD and one behavioural characteristic of OCD that can be identified in the description provided by Steven.

 Marks for this question: AO2 = 2

1 mark for outline of a cognitive characteristic of OCD from the stem: hypervigilance – ‘looking out for people who are ill’; catastrophic thinking – ‘I might catch it and die’.

Plus

1 mark for outline of a behavioural characteristic of OCD from the stem: repetitive cleaning – ‘I have to clean myself’.
09 Complete Figure 2 below, by filling in A and B, to show Beck’s negative triad as it is used to explain depression. [2 marks]

Marks for this question: AO1 = 2

A – self 1 mark
B – future 1 mark

Terms must be in the correct position for credit.

Figure 2: Beck’s negative triad

Negative views about A SELF for example: ‘I am worthless’

Negative views about B FUTURE for example: ‘I will never be any good at anything’

Negative views about C the world for example: ‘Nobody values me’

10 Briefly outline one strength of the cognitive explanation of depression. [2 marks]

Marks for this question: AO3 = 2

2 marks for a clear and coherent outline of one strength of the cognitive explanation of depression with some elaboration.

1 mark if the strength is briefly outlined/vague/muddled.

Possible content:
- based on sound experimental research
- have provided effective treatments for depression
- acknowledges role of thoughts in behaviour/disorders.

Credit other relevant strengths.
Outline and evaluate the behavioural approach to treating phobias.

Marks for this question: AO1 = 6 and AO3 = 6

<table>
<thead>
<tr>
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<th>Marks</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>10–12</td>
<td>Knowledge of the behavioural approach to treating phobias is accurate and generally well detailed. Evaluation is effective. The answer is clear, coherent and focused on treating phobias. Specialist terminology is used effectively. Minor detail and/or expansion of argument sometimes lacking.</td>
</tr>
<tr>
<td>3</td>
<td>7–9</td>
<td>Knowledge of the behavioural approach to treating phobias is evident. The answer is mostly well focused. There are occasional inaccuracies. There is some effective evaluation. The answer is mostly clear and organised. Specialist terminology mostly used effectively.</td>
</tr>
<tr>
<td>2</td>
<td>4–6</td>
<td>Knowledge of the behavioural approach to treating phobias is present. Focus is mainly on description. Any evaluation is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology used inappropriately on occasions.</td>
</tr>
<tr>
<td>1</td>
<td>1–3</td>
<td>Knowledge of the behavioural approach to treating phobias 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>

Outline – possible content:
- aims to replace a faulty association between CS and CR that has resulted in a phobic response
- gradually using systematic desensitisation – relaxation technique, anxiety hierarchy, exposure stages, imagined and or real/in vivo
- suddenly using flooding – no relaxation, visualisation, intensive exposure in vivo or in vitro
- virtual reality exposure therapy as an in vitro form of systematic desensitisation

Credit other relevant aspects of the behavioural approach to treating phobias.

Evaluation – possible content:
- issues related to suitability and effectiveness for different types of phobia
- success outside the clinical situation and long-term effectiveness
- ethical problems, eg with flooding
- side effects such as nausea for VRET
- comparison with alternative treatments
- use of evidence to support or refute effectiveness.

Credit other relevant evaluation points.
Section C

Research methods

12.1 Identify the experimental design used in this study and outline one advantage of this experimental design. [3 marks]

Marks for this question: AO1 = 1 and AO3 = 2

1 mark for identification of the correct experimental design – independent groups/independent measures.

Plus

2 marks for a clear and coherent outline of an advantage using appropriate terminology.

OR

1 mark for a brief/vague/muddled outline of an advantage.

Possible advantages:

• performances not affected by order effects as people only do one condition
• demand characteristics less likely as participants only aware of own condition
• same task/materials can be used in both conditions as participants are always naïve to the task.

Credit other relevant advantages.

12.2 Describe one other experimental design that researchers use in psychology. [2 marks]

Marks for this question: AO1 = 2

2 marks for a clear and coherent outline of how participants are used in either a repeated measure or a matched pairs design.

1 mark for a vague, muddled or incomplete outline of a repeated measure or a matched pairs design.

If the answer to 12.1 is incorrect, credit a different design to that given.
Apart from using random allocation, suggest one way in which the psychologist might have improved this study by controlling for the effects of extraneous variables. Justify your answer. 

Marks for this question: AO3 = 2

1 mark for an appropriate and plausible suggestion.

Plus

1 mark for an appropriate justification.

Likely suggestions:
- testing all participants in the same room
- making sure that all participants hear the same instructions
- ensuring that all participants are tested by the same researcher.

Credit other relevant suggestions.

Write a suitable hypothesis for this study.

Marks for this question: AO2 = 3

3 marks for an appropriate non-directional (or directional) operationalised hypothesis: ‘There is a difference in the number of ideas generated when participants work alone and when they work in groups.’

2 marks for a statement with both conditions of the IV and DV that lacks the clarity or has only one variable operationalised.

1 mark for a muddled statement with both conditions of the IV and DV where neither variable is operationalised.

0 marks for expressions of aim/questions/correlational hypotheses or statements with only one condition.

Full credit can be awarded for a hypothesis expressed in a null form.
12.5 From the information given in the description, calculate the number of participants in each group in **Condition B**.

[1 mark]

**Marks for this question: AO2 = 1**

1 mark: 3 (in each group)

12.6 Name a measure of dispersion the psychologist could use.

[1 mark]

**Marks for this question: AO1 = 1**

1 mark for naming a suitable measure of dispersion (range or standard deviation).

12.7 The psychologist uses the measure of dispersion you have named in your answer to **question 12.6**. State how the result for each condition would differ.

[1 mark]

**Marks for this question: AO2 = 1**

1 mark for stating that the statistic calculated (either the range or the SD) would be greater in **Condition A** than in **Condition B**.

or written as

1 mark for stating that the statistic calculated (either the range or the SD) would be less in **Condition B** than in **Condition A**.

12.8 Explain how the psychologist could have used random allocation to assign the 15 participants in **Condition B** into the 5 groups.

[3 marks]

**Marks for this question: AO2 = 3**

Marks for a clear description of a practical way as follows:

1 mark – all the participants allocated a number from 1 to 15.
1 mark – the 15 numbers are put in a hat.
1 mark – assign first three numbers drawn to a group and repeat process for other 4 groups.

Accept other valid descriptions that would be practical and produce the same outcome.
12.9 Using the information given in Table 2, explain how the psychologist could further analyse the data using percentages. [2 marks]

Marks for this question: AO3 = 2

1 mark: for each condition, the overall number of ideas generated should be divided by the overall total of 185.

Plus

1 mark: the result for each condition should then be multiplied by 100 to give the percentage.

12.10 At the end of the study the psychologist debriefed each participant. Write a debriefing that the psychologist could read out to the participants in Condition A. [6 marks]

Marks for this question: AO2 = 6

<table>
<thead>
<tr>
<th>Level</th>
<th>Marks</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>5–6</td>
<td>Both elements of required content are clear and mostly well detailed. The debrief is all in verbatim format.</td>
</tr>
<tr>
<td>2</td>
<td>3–4</td>
<td>Both elements of required content are present. The answer lacks detail and/or clarity in places. Some of the answer is in verbatim format.</td>
</tr>
<tr>
<td>1</td>
<td>1–2</td>
<td>There is some information about at least one element of required content. The answer lacks clarity. Verbatim format is lacking. For one mark there must be some relevant content, eg an optional point about ethics.</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>No relevant content.</td>
</tr>
</tbody>
</table>

Required content:
- explanation of the aim: to see if creativity is affected by the presence or absence of others
- information about the other condition – in an independent design people need to know about the condition in which they did not take part.

Optional content:
- specific ethical issues, eg right to withdraw data/be informed of results/check of welfare
- general ethical considerations, eg respect for participants.
## Assessment Objective Grid

### Approaches in biopsychology

<table>
<thead>
<tr>
<th>Approaches in biopsychology</th>
<th>AO1</th>
<th>AO2</th>
<th>AO3</th>
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### Psychopathology

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### Research methods

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**Paper Total** 21 30 21 72

Research methods = 31 marks
Maths = 11 marks