



AS Psychology

7181/2

Final Mark scheme

Paper 2: Psychology In Context
June 2017

Version/Stage: v1.0

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 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 – Approaches in Psychology

0 1

Which of the following best describes the aim of cognitive neuroscience? Shade **one** box only.

[1 mark]

Marks for this question: AO1 = 1

1 mark for A

0 2

Outline the fight or flight response.

[3 marks]

Marks for this question: AO1 = 3

Award **1 mark** for any three of the following bullet points.

Possible content:

- hypothalamus prepares the body for action/emergency response.
- involves the release of adrenaline (from the adrenal gland/medulla).
- Triggers/activates/switches from parasympathetic to sympathetic activity and back again.
- direct effects of adrenaline, eg increase heart rate – constricts blood vessels, increasing rate of blood flow and raising blood pressure – diverts blood away from the skin, kidneys and digestive system – increases blood to brain and skeletal muscle – increases respiration and sweating.

0 3

Outline Skinner's research into reinforcement.

[3 marks]

Marks for this question: AO1 = 3

3 marks: reinforcement is outlined accurately, with clarity and coherence.

2 marks: reinforcement is outlined with some detail, clarity and/or coherence.

1 mark: there is some relevant outline of Skinner's research into reinforcement.

Possible content:

- detail of procedures of Skinner's research using the Skinner box and the conditioning of lever pressing in rats. Credit alternative research such as conditioning of pigeons to play ping pong
- knowledge of Skinnerian concepts in the context of operant conditioning experiments: reinforcement (positive and negative), extinction, spontaneous recovery, generalisation, discrimination, schedules of reinforcement and behaviour-shaping
- detail of operant conditioning theory – voluntary responses, consequences of actions.

Credit other relevant information.

0	4
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Explain how reinforcement might be used to encourage primary school children to pick up litter in the playground.

[3 marks]

Marks for this question: AO2 = 3

3 marks: application to the stem explained with clarity and coherence.

2 marks: application to the stem explained with some clarity and/or coherence.

1 mark: there is some relevant application to the stem.

Possible application points:

- Use a 'token economy system' with respect to litter-picking. Use of a positive reinforcement strategy – for 'x' amount of litter, a reward of 'y' and exchange of 'y' for something pleasant the children will value.
- direct primary reinforcement (e.g. deliberately rewarding children who pick up litter).
- use of vicarious reinforcement (e.g. watching a film or seeing teacher deliberately rewarding children who pick up litter).

Credit other relevant application (e.g. negative reinforcement, behaviour shaping).

0	5
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Write a brief explanation of inference that would help Adil to understand what his teacher means.

[2 marks]

Marks for this question: AO2 = 2

2 marks for a clear explanation of inference suitable for a new psychology student: make assumptions about mental processes that cannot be directly observed/going beyond the immediate research evidence.

1 mark for a limited or muddled explanation of inference.

Accept explanations that are embedded in examples.

0 6

Describe and evaluate the social learning theory. Refer to the conversation above as part of your answer.

[12 marks]

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

Level	Marks	Description
4	10 - 12	Knowledge of social learning theory is accurate and generally well detailed. Application is appropriate. Evaluation is effective. Minor detail and/or expansion is sometimes lacking. The answer is clear and coherent. Specialist terminology is used effectively.
3	7 - 9	Knowledge of social learning theory is evident but there are occasional inaccuracies/omissions. There is some attempt at application. There is some effective evaluation. The answer is mostly clear and organised. Specialist terminology is mostly used appropriately.
2	4 - 6	Limited knowledge of social learning theory is present. Focus is mainly on description. Any evaluation is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions. OR knowledge at level 4 can be awarded 6 marks.
1	1 - 3	Knowledge of social learning theory 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.
	0	No relevant content

Possible content:

- learning takes place in a social context
- learning occurs via observation of the behaviour of others and the rewards or punishments received for the behaviour – vicarious reinforcement
- other people act as models and the characteristics of models influence the likelihood of imitation of the behaviour
- learning and performance are not the same activity
- mediational processes, eg attention, retention, motivation, reproduction, affect production of behaviour
- reciprocal determinism and the concept of free will
- concept of identification.

Possible application:

- Samira is commenting on how John's little sister has copied how John uses a mobile phone. This illustrates any number of possible SLT behaviours: observational learning, imitation, modelling, identification and even internalisation
- John is commenting on how behaviour can be learned by indirect reinforcement/vicarious reinforcement – seeing someone punished for a behaviour decreases the likelihood of that behaviour being imitated.

Possible evaluation:

- use of evidence to support social learning theory, eg Bobo doll study
- benefits of the experimental approach to investigate social learning theory and issues with experimental evidence that might affect the validity of the results and therefore the conclusions drawn
- focus on human traits of consciousness and rationality which cannot be demonstrated with animal research, addresses the influence of mediational processes on learning – neglected by behaviourists
- provides explanations that relate to behaviours such as aggression and intellectual development
- does not pay much attention to the impact of biological, heredity or maturational factors on behaviour, evidence from these areas of research does show they do have an impact.
- can account for cultural differences in behaviour.
- credit valid comparison with other approaches.

Credit other relevant information.

Note: evaluation of evidence is only credit-worthy if linked back to social learning theory.

Section B – Psychopathology

0 7

Briefly outline how flooding might be used to treat a phobia.

[2 marks]

Marks for this question: AO1 = 2

2 marks for a clear and coherent outline of flooding including all three bullet points.

1 mark for an outline that only includes one or two bullet points.

Content:

- immediate/direct/full exposure
- prevention of avoidance
- until they are calm/anxiety has receded/fear is extinguished

0 8

Briefly outline how systematic desensitisation might be used to treat a phobia.

[2 marks]

Marks for this question: AO1 = 2

2 marks for a clear and coherent outline of systematic desensitisation including all three bullet points.

1 mark for an outline that only includes one or two bullet points.

Content:

- relaxation training
- anxiety hierarchy
- gradual exposure to the anxiety hierarchy.

0 9

Briefly discuss **one** reason why systematic desensitisation might be a more successful treatment for phobias than flooding.

[2 marks]

Marks for this question: AO3 = 2

2 marks for a brief discussion of why systematic desensitisation might be a more successful treatment for phobias than flooding.

1 mark for a muddled or limited discussion.

Possible content:

- systematic desensitisation (SD) might be more successful as it allows people to make progress in small steps/in their own time scale rather than that required by the therapist – client in control
- SD generally has low attrition rates/high completion rates because the gradual process of the therapy allows respite – the relaxation is pleasant.
- SD may be more successful for certain individuals, e.g. children, people with certain health conditions.
- SD may be less traumatic leading to more people completing the treatment, and suitable for a wider range of clients.

Accept other relevant information, e.g. reasons why SD may be less successful.

1 0

Explain what is meant by ‘obsessions’ and ‘compulsions’. Refer to Bob in your answer.

[4 marks]

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

1 mark for a definition of obsessions – obsessions are intrusive/recurring/unwanted thoughts.

1 mark for a definition of compulsions – compulsions are repetitive behaviours/acts.

1 mark for application of knowledge of obsessions to the scenario – Bob is overwhelmed by fear that his family will be in danger due to him.

1 mark for application of knowledge of compulsions to the scenario – Bob checks that doors are locked or plug sockets switched off before he can leave the house.

1 1

How might the biological approach be used to explain Bob's obsessive-compulsive disorder?

[4 marks]

Marks for this question: AO2 = 4

Level	Marks	Description
2	3 - 4	There is a clear knowledge of biological explanation(s) for OCD with some accurate detail. Application is effective. The answer is generally coherent with effective use of appropriate terminology.
1	1 - 2	There is limited or partial knowledge of biological explanation(s) for OCD with some detail. Application is limited or absent. The answer lacks coherence and use of appropriate terminology.
	0	No relevant content

Possible content:

Neural explanations (neurochemical and neurophysiological) – Bob is having a scan.

- The basal ganglia and other circuits have been implicated suggesting that disturbed communication in these structures might account for the repetitive behaviours seen in Bob's OCD. Also, OCD linked to abnormality/excessive activity in the orbital frontal cortex/thalamus; abnormal functioning of the parahippocampal gyrus – related to the regulation of unpleasant emotions.
- Low levels of neurotransmitters, eg serotonin - serotonin might be removed too quickly before impulses have passed.

Genetic explanations – Bob's family history is being looked at.

- Focus on the search for gene markers that Bob might have inherited – gene 9, COMT, SERT.
- Family studies indicate a higher percentage of first degree relatives, ie Bob's parents, have this disorder – 10% compared to the prevalence rate of 2%.

Accept other relevant information.

1	2
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Explain how findings of psychological research into the treatment of depression could have implications for the economy.

[2 marks]

Marks for this question: AO2 = 2

2 marks for a clear and coherent explanation of how research into treating depression might have implications for the economy.

1 mark for a vague or muddled explanation.

Possible content:

- psychological research findings into psychopathology may lead to improvements in psychological health/treatment programmes which may mean that people manage their health better and take less time off work. This would reduce costs to the economy
- psychological research findings may lead to better ways of managing people who are prone to mental health issues whilst they are at work which could improve their individual productivity, again boosting the economy overall
- 'cutting-edge' scientific research findings into treatments for mental health issues carried out in UK may encourage investment from overseas companies into this country which could boost the economy
- providing effective treatments might be a significant financial burden to an NHS service already under huge financial strain
- discovering that new treatments may be more effective than older therapies and that these may be more expensive so could increase the financial burden to the economy.

Credit other relevant explanations.

1 3Outline and evaluate **two** definitions of abnormality.**[8 marks]****Marks for this question: AO1 = 4 and AO3 = 4**

Level	Marks	Description
4	7 - 8	Knowledge of two definitions of abnormality is accurate with some detail. Evaluation of the two definitions is effective. Minor detail and/or expansion is sometimes lacking. The answer is clear and coherent. Specialist terminology is used effectively.
3	5 - 6	Knowledge of two definitions of abnormality is evident but there are occasional inaccuracies/omissions. There is some effective evaluation of definition(s). The answer is mostly clear and organised. Specialist terminology is mostly used appropriately.
2	3 - 4	Limited knowledge of one or two definitions of abnormality is present. Focus is mainly on description. Any evaluation is of only one definition or of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions. Or one definition at level 3/4.
1	1 - 2	Knowledge of one or two definitions of abnormality is very limited. Evaluation of definition(s) 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.
	0	No relevant content

Possible content:

Definitions of abnormality:

- statistical infrequency/deviation from statistical norms – abnormal behaviour is that which is rare/uncommon/anomalous
- deviation from social norms – abnormal behaviour is that which goes against/contravenes unwritten rules/expectations in a given society/culture
- failure to function adequately – abnormal behaviour is that which causes person distress/anguish or an inability to cope with everyday life/maladaptiveness
- deviation from ideal mental health – abnormality is that which fails to meet prescribed criteria for psychological normality/wellbeing, eg accurate perception of reality, resistance to stress, etc.

Possible evaluation points:

- statistical infrequency/deviation from statistical norms – fails to account for behaviour that is statistically rare but desirable such as having a very high IQ; some disorders are not statistically rare; issue of who decides where the cut-off point is

- deviation from social norms – eccentric behaviours are not necessarily abnormal; social norms vary with time and with culture
- failure to function adequately – many mental disorders do not cause personal distress; many behaviours, eg smoking, are maladaptive but not a sign of psychological abnormality
- deviation from ideal mental health – the criteria are too demanding – most people would be judged abnormal based on this definition; many of the criteria reflect Western cultural norms of psychological 'normality'
- implications for diagnosis and/or treatment.

Accept other relevant evaluation points.

Section C – Research Methods**1 4**

Should the hypothesis for this study be directional? Explain your answer.

[2 marks]**Marks for this question: AO2 = 2**

2 marks for explanation that a non-directional hypothesis is suitable or 'it should not be directional,' (1) as there is no reference to evidence that allows the psychologist to predict the direction of the results (1).

1 mark for a muddled/limited explanation of why the hypothesis should be non-directional or 1 mark for stating non-directional/'no'.

1 5

What percentage of the students reported that they would be able to concentrate 'better' if they listened to music while they worked? Show your workings.

[2 marks]**Marks for this question: AO2 = 2**

2 marks for correct answer 55(%)

1 mark for correct workings only $22/40 = 0.55 \times 100$

1 6

Explain why using stratified sampling might improve this study.

[2 marks]**Marks for this question: AO3 = 2**

2 marks for a clear explanation of why stratified sampling might improve the study.

1 mark for a muddled/limited explanation

Relevant points:

- stratified sampling increases representation/generalisation by sampling many subsets of students
- stratified sampling reduces research bias as the subsets of students are selected randomly.

Credit other relevant answers, e.g. stratified sampling increases external validity/population validity by sampling many subsets of students, or justification through comparison with volunteer sampling.

Note: No marks for simply stating increases validity/reliability.

1 7

The data collected in this study is primary data.

Explain what is meant by 'primary data'.

[2 marks]

Marks for this question: AO1 = 2

2 marks for a clear explanation of primary data.

1 mark for a muddled or limited explanation (e.g. reference to 'first hand' or focus on researcher not data).

Content

- primary data is original data/first hand response of the participants/source in the research.
- collected specifically for the research being carried out.

Credit answers that refer to the data in the study described.

Note: do not credit an answer which simply states collected by the researcher.

1 8

Explain **one** reason why the mean would be the most appropriate measure of central tendency to summarise the data in **Table 2**?

[2 marks]

Marks for this question: AO2 = 2

2 marks for identification and a clear explanation of one reason why the mean is the most appropriate measure of central tendency.

1 mark for identification of one reason.

Possible reasons:

- the mean can be said to be **representative of all the data** collected as it is calculated using all the individual values.
- the mean is the **most sensitive measure of central tendency** as it uses all the values in set of data.

Accept other valid reasons.

1 9

Calculate the mean values for **both** Task A **and** Task B. Show your workings.

[4 marks]

Marks for this question: AO2 = 4

Task A

2 marks for correct answer 63 (secs)

1 mark for correct workings only 630/10

Task B

2 marks for correct answer 77.4 (secs)

1 mark for correct workings only 774/10

2 0

The psychologist used counterbalancing in the follow-up study.

Discuss the purpose of counterbalancing.

[3 marks]

Marks for this question: AO3 = 3

3 marks for a clear and coherent discussion of the purpose of counterbalancing.

2 marks for some relevant discussion.

1 mark for a muddled/limited discussion.

Possible content:

- it controls the impact of order effects (practice, fatigue or boredom).
- allows order effects to be distributed evenly across both conditions.
- making each condition of the IV occur as the first task and the second task equally.
- counterbalancing does not eliminate order effects which will be present because there are two separate tasks to be completed by each person.

Note: No marks for answers which only state decreasing/reducing/eliminating/preventing order effects without reference to any of the above points.

2	1
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Identify **one** possible extraneous variable that the psychologist should have controlled in this follow-up study. Explain how this variable might have affected the results of the study if it was not controlled.

[3 marks]

Marks for this question: AO2 = 3

1 mark for identification of **one** appropriate extraneous variable.

Possible variables: that can be controlled and need to stay constant for all participants or from Task A to Task B to avoid affecting the dependent variable:

- level of difficulty in the two 'spot the difference tasks'
- wearing of headphones
- the music/tracks
- instructions for participants.
- characteristics of the psychologist.
- change in environmental conditions.

Accept other relevant variables.

Do **not** accept participant variables.

Possible explanations:

1 mark for elaboration of the effect of the EV.

1 mark for how it might have affected the DV (the effect on time).

2	2
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Explain how the follow-up study could be said to be an improvement on the original study.

[4 marks]

Marks for this question: AO3 = 4

Level	Marks	Description
2	3 - 4	There is a clear and detailed explanation of how the second study improves on the first study. The answer is generally coherent with effective use of appropriate terminology.
1	1 - 2	There is limited or partial explanation of how the second study improves on the first study. The answer lacks coherence and use of appropriate terminology.
	0	No relevant content

Possible content:

- the second study is more objective. In the first study participants self-reported what they believed to be the case and this is refuted by the follow-up study
- the measurement of time allows for more detailed analysis of data.
- use of experimental method involves manipulation of IV, establishing cause and effect in follow-up study which is not a feature of the self-report method used in the first study
- possibility of socially desirable answers as a feature of first study which might be unreliable and this is not present in follow-up study where measurements are more direct.

Credit other possible explanations.

Note: no marks for simply stating more valid/reliable.

7181/2 June 2017 Assessment Objectives Grid

Question	AO1	AO2	AO3
Approaches			
1	1		
2	3		
3	3		
4		3	
5		2	
6	6	2	4
Total: 24	13	7	4
Psychopathology			
7	2		
8	2		
9			2
10	2	2	
11		4	
12		2 RM	
13	4		4
Total: 24	10	8	6
Research Methods			
14		2 RM	
15		2 RM	
16			2 RM/Maths
17	2 RM		
18		2 RM/Maths	
19		4 RM/Maths	
20			3 RM
21		3 RM	
22			4 RM
Total: 24	2	13	9
	25	28	19

RM – 26

Maths - 8