

A-LEVEL PSYCHOLOGY A

PSYA2/Unit 2: Biological Psychology, Social Psychology and Individual Differences
Mark scheme

2180
Summer 2014

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 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

Section A**Question 1****AO1 = 4**

Outline one study that has investigated stress-related illness and the immune system. In your answer you should refer to what was done and what was found.

Students can gain full marks for outlining methods and results; **or** for outlining methods, results and other aspects of the study (eg aim, conclusion) in less detail.

There are several studies that can be outlined, but they must be studies that explicitly set out to investigate stress related illness and the immune system. Likely studies are those by Kiecolt-Glaser et al (either the study with medical students or the study with carers) or Cohen et al. The meta analysis by Segerstrom and Miller would also be creditworthy, although addressing the “what was done” might be more difficult for candidates. Animal research is acceptable as long as it refers to the immune system; for example Riley’s mice. However, Brady’s monkeys is not a study of the immune system and therefore is not creditworthy.

For full marks, there does not need to be a balance between methods and findings.

<p>4 marks Accurate and reasonably detailed Accurate and reasonably detailed description that demonstrates sound knowledge and understanding of one study, including reference to both what was done and what was found. There is appropriate selection of material to address the question.</p>
<p>3 marks Less detailed but generally accurate Less detailed but generally accurate description that demonstrates relevant knowledge and understanding of what was done and what was found. There is some evidence of selection of material to address the question.</p>
<p>2 marks Basic Basic description that demonstrates some relevant knowledge and understanding of what was done and what was found, but lacks detail and may be muddled. Or only what was done or what was found. There is little evidence of selection of material to address the question.</p>
<p>1 mark Very brief/flawed or inappropriate The candidate provides a description, which is very brief or flawed and demonstrates very limited knowledge of either what was done or what was found. Selection and presentation of information is largely or wholly inappropriate.</p>
<p>0 marks No creditworthy material.</p>

Question 2**AO2 = 4**

Mrs Sands is the director of a small company that employs 50 people. Her job involves making decisions concerning the running of the company. Mrs Hewitt is one of the employees and her workload is determined by the requirements of other departments in the company. She often has to stay late to complete her work.

Explain why Mrs Sands or Mrs Hewitt is likely to experience the negative effects of stress. Justify your answer with reference to research into workplace stress.

The stem refers to the role of control (Mrs Sands making decisions) and lack of control (Mrs Hewitt having no say in the way she works but her work being determined by others). Candidates can make a case for either of the women being more likely to be stressed: Mrs Sands because of high workload as she makes the decisions or Mrs Hewitt who has so much work that she has to stay late; Mrs Hewitt lack of control, but they need to justify their choice. Candidates are likely to refer to research by Marmot or Johansson. Karasek's model could also be used effectively here. For full marks there must be explicit reference to relevant research and also explicit engagement with the stem.

Brady's monkeys is not a study of workplace stress and therefore not creditworthy.

<p>4 marks Effective analysis of unfamiliar situation Effective explanation that demonstrates sound knowledge of research into the effects of workplace stress and explicit engagement with either of the women in the scenario.</p>
<p>3 marks Reasonable analysis of unfamiliar situation Reasonable explanation that demonstrates knowledge of research into the effects of workplace stress and some engagement with either of the women in the scenario.</p>
<p>2 marks Basic analysis of unfamiliar situation Basic explanation of research into the effects of workplace stress, but no engagement with the scenario.</p>
<p>1 mark Rudimentary analysis of unfamiliar situation Rudimentary, muddled, explanation of negative effects of workplace stress or an answer that doesn't extend beyond the material in the stem.</p>
<p>0 marks No creditworthy material.</p>

Question 3

‘People respond differently to stress depending on whether they have Type A personality, Type B personality or whether they display hardiness.’

Discuss research studies which have investigated the way in which personality factors influence how people respond to stress.

AO1 = 6

AO1: Credit should be given for description of research studies. Straight description of Type A/Type B without any links to responses to stress = 0 marks. Description without studies can gain up to 3 marks if links to stress is evident, as personality types are based on research findings. Whilst the specification refers to Type A and Type B personalities and hardiness, candidates may refer to other personality types, for example Type C and Type D. The most likely study, however, is that of Friedman & Rosenman’s Western Collaborative Study which found that men with Type A personality were more likely to suffer from CHD. The other likely research is that by Kobasa into the hardy personality, who found that individuals with the three characteristics of hardiness reported fewer stress-related symptoms.

Although the wording of the question indicates studies plural, partial performance does not apply and one study could in theory, be acceptable for full marks. If just one study is given it would need to be in sufficient detail.

AO2 = 6

The commentary can come from evaluation of studies themselves or use of one study to evaluate another. For example, Maddi et al, providing evidence for the link between hardiness and stress in employees of an American company, supports Kobasa’s research. Or Lifton et al who did similar research with university students. Some studies challenged the findings of Friedman & Rosenman, for example Myrtek suggested that it was hostility (which is an aspect of Type A personality) that was the important link, not TAB itself.

Candidates can also comment on the methods used in these studies, for example the Western Collaborative study had a very large sample size – this enhances reliability. Implications from research and applications of research are also creditworthy.

AO1 Knowledge and understanding	AO2 Application of knowledge and understanding
<p>6 marks Accurate and reasonably detailed Accurate and reasonably detailed description that demonstrates sound knowledge and understanding of research into the way in which personality factors influence how people respond to stress. There is appropriate selection of material to address the question.</p>	<p>6 marks Effective evaluation Effective use of material to address the question and provide informed commentary. Effective evaluation of research. Broad range of issues and/or evidence in reasonable depth, or a narrower range in greater depth. Clear expression of ideas, good range of specialist terms, few errors of grammar, punctuation and spelling.</p>
<p>5 - 4 marks Less detailed but generally accurate Less detailed but generally accurate description that demonstrates relevant knowledge and understanding. There is some evidence of selection of material to address the question.</p>	<p>5 - 4 marks Reasonable evaluation Material is not always used effectively but produces a reasonable commentary. Reasonable evaluation of research. A range of issues and/or evidence in limited depth, or a narrower range in greater depth. Reasonable expression of ideas, a range of specialist terms, some errors of grammar, punctuation and spelling.</p>
<p>3 - 2 marks Basic Basic description that demonstrates some relevant knowledge and understanding but lacks detail and may be muddled. There is little evidence of selection of material to address the question.</p>	<p>3 - 2 marks Basic evaluation The use of material provides only a basic commentary. Basic evaluation of research. Superficial consideration of a restricted range of issues and/or evidence. Expression of ideas lacks clarity, some specialist terms used, errors of grammar, punctuation and spelling detract from clarity.</p>
<p>1 mark Very brief/flawed or inappropriate Very brief or flawed description demonstrating very little knowledge. Selection and presentation of information is largely or wholly inappropriate.</p>	<p>1 mark Rudimentary evaluation The use of material provides only a rudimentary commentary. Evaluation of research is just discernible or absent. Expression of ideas poor, few specialist terms used, errors of grammar, punctuation and spelling often obscure the meaning.</p>
<p>0 marks No creditworthy material.</p>	<p>0 marks No creditworthy material.</p>

Question 4

AO3 = 4 – The skill being assessed is interpretation of data from a table.

The results from a study to compare the effectiveness of different types of stress management are shown in the table below.

Each participant completed a self-assessment after 4 weeks of treatment and again after 6 weeks of treatment. The participants rated their improvement on a scale of 1 – 10: the higher the score, the more they felt they had improved.

	Biological methods (drug therapy) of stress management		Psychological method of stress management
	Benzodiazepines	Beta blockers	Stress Inoculation Therapy
Average rating score after 4 weeks	5.8	4.2	3.7
Average rating score after 6 weeks	6.1	5.9	8.4

What do these results show about the effectiveness of different methods of stress management?

There are several points candidates could make.

- All methods are effective in managing stress
- Initially drugs work faster than SIT
- Initially BZs work faster than beta blockers
- SIT has the best result but only after 6 weeks
- There is little difference between which type of drug used after 6 weeks.

Data on its own without justification is not creditworthy.

E.g. Both types of drug are more effective than SIT after only 4 weeks (1 mark) because both ratings 5.8 and 4.2 are higher than 3.7 (2nd mark – data used to justify).

E.g. SIT takes longer than drugs to show any improvement (1 mark) as it has the lowest improvement score at 4 weeks (2nd mark), but after 6 weeks it is much more effective than either of the drugs (3rd mark).

E.g. initially after 4 weeks, drugs are more effective than SIT (1 mark). With BZs being just a bit more effective than BBs (2nd mark) But after 6 weeks there is less difference between the two drugs (3rd mark) and SIT is clearly much more effective than either drug it just takes longer to work (4th mark).

4 marks Effective interpretation of data Effective interpretation that demonstrates sound understanding of what the data shows, with reference to both type of method and length of time.
3 marks Reasonable interpretation of data Reasonable interpretation of what the data shows, with reference to type of method and length of time but one in more detail.
2 marks Basic interpretation of data Basic interpretation of what the data shows; in terms of, for example “better” or “worse”.
1 mark Rudimentary interpretation of data Rudimentary, muddled interpretation of the data, demonstrating very limited knowledge.
0 marks No creditworthy material. Data on its own without justification is not creditworthy.

Section B**Question 5****AO1 = 2 marks****Internalisation is a type of conformity. Outline what is meant by ‘internalisation’.**

Internalisation involves a change in both public and private belief. It is a more permanent type of change and can continue without the presence of the group.

1 mark for a brief answer (people change both publically and privately) and a further mark for elaboration (this is a more permanent change).

Question 6**AO1 = 4 marks****Explain how locus of control influences independent behaviour.**

Those with an internal locus of control tend to be the risk-takers in society and show independent behaviour. Those with an internal locus of control believe that they have control over their own behaviour and take responsibility for their own action. They have confidence and therefore have no need for external approval. Consequently they do not feel the need to conform and are less likely to obey.

People with an external locus of control are less likely to behave independently as they do not believe they have control over events in their life and are more likely to seek approval from others.

Candidates must be clear that it is those with an internal locus of control who remain independent. Reference to “high” or “low” locus of control cannot gain credit unless it is explicitly linked to internal or external.

<p>4 marks Accurate and reasonably detailed Accurate and reasonably detailed explanation that demonstrates sound knowledge and understanding of how locus of control influences independent behaviour. There is appropriate selection of material to address the question.</p>
<p>3 marks Less detailed but generally accurate Less detailed but generally accurate explanation that demonstrates relevant knowledge and understanding of how locus of control influences independent behaviour. There is some evidence of selection of material to address the question.</p>
<p>2 marks Basic Basic explanation that demonstrates some relevant knowledge and understanding of how locus of control influences independent behaviour but lacks detail and may be muddled. There is little evidence of selection of material to address the question.</p>
<p>1 mark Very brief/flawed or inappropriate The candidate provides an explanation, which is very brief or flawed and demonstrates very limited knowledge of how locus of control influences independent behaviour. Selection and presentation of information is largely or wholly inappropriate.</p>
<p>0 marks No creditworthy material.</p>

Question 7**AO1 = 4 marks****For each of the terms below, tick whether the definition is true or false.**

Term	Definition	True	False
Normative Social Influence	Going along with what others do because you believe it to be the right thing to do		
Informational Social Influence	Copying other people because they know more than you do		
Normative Social Influence	Looking to see what other people do so that you are not wrong		
Informational Social Influence	Doing what other people are doing so that you will be liked by them		

- (1) = false
- (2) = true
- (3) = false
- (4) = false

Question 8**AO3 = 4 marks****Psychologists deal with ethical issues in a variety of ways. Explain one or more ways of dealing with ethical issues in social influence research.**

Candidates can describe any relevant way of dealing with an ethical issue, such as debriefing, prior general consent, presumptive consent, retrospective consent. Other methods such as using a virtual environment rather than a real one could also be considered. They can also take a wider view of how to deal with such issues, by considering the use of ethical committees, conducting a cost-benefit analysis, or the role of the BPS Guidelines. There is clearly a depth breadth trade off; candidates could describe one method in detail or more than one but in less detail. Merely listing ways of dealing with ethical issues without any explanation – 2 marks.

4 marks Accurate and reasonably detailed

Accurate and reasonably detailed answer that demonstrates sound understanding of ways of dealing with ethical issues. One way in detail or more than one way but in less detail. There is appropriate selection of material to address the question.

3 marks Less detail but generally accurate

Less detailed but generally accurate answer that demonstrates understanding. There is some evidence of selection of material to address the question.

2 marks Basic

Basic answer that demonstrates some relevant understanding but lacks detail and may be muddled. There is little evidence of selection of material to address the question. Merely listing ways of dealing with ethical issues without any explanation.

1 mark Very brief/flawed inappropriate

Very brief or flawed answer demonstrating very little understanding. Or merely listing some relevant methods. Selection and presentation of information is largely or wholly inappropriate.

0 marks

No creditworthy material.

Question 9**AO2 = 6 marks**

‘Milgram’s research has been criticised for its method and for its ethics.’ Evaluate the method used by Milgram in his research into obedience to authority. Do not refer to ethics in your answer.

As Milgram used a laboratory study, candidates could evaluate it by considering the strengths or the weaknesses. The strengths include the ability to control variables, to allow replication and therefore check reliability. The weaknesses could refer to issues of validity, both internal and external. He also conducted this experiment in other locations and evaluation of these variations is also creditworthy.

Candidates can refer directly to Milgram’s study, or take a broader approach to studies in general.

Ethical considerations are not creditworthy.

<p>6 marks Effective evaluation Effective use of material to address the question and provide informed commentary. Effective evaluation of research. There is appropriate selection of material to address the question.</p>
<p>5-4 marks Less detailed but generally accurate Material is not always used effectively but produces a reasonable commentary. Reasonable evaluation of research. There is some evidence of selection of material to address the question.</p>
<p>3-2 marks Basic The use of material provides only a basic commentary. Basic evaluation of research. There is little evidence of selection of material to address the question.</p>
<p>1 mark Very brief/flawed or inappropriate The use of material provides only a rudimentary commentary. Evaluation of research is just discernible or absent.</p>
<p>0 marks No creditworthy material.</p>

Question 10**AO2 = 4 marks**

Using your knowledge of psychology, explain why a pupil would be less likely to pick up an empty can in the playground when told to do so by a fellow pupil than when told to do so by the head teacher.

For credit, answers must focus on why pupils are **less** likely to obey.

Research has indicated that people are less likely to obey a request from someone who is not perceived as having legitimate authority. Milgram's study demonstrated that obedience fell when the experimenter was not wearing his lab coat (an indication of his status and authority). Bickman's study showed that when the confederate was wearing casual clothes, fewer people obeyed his request.

In the stem, the fellow pupil is perceived as having less status and authority than the head teacher. The fellow pupil has fewer (if any) sanctions than the head teacher if the request is not obeyed. The fellow pupil might also be wearing school uniform which indicates their status and power (both being low)

4 marks Effective analysis of unfamiliar situation

Effective explanation that demonstrates sound knowledge of why pupils are less likely to obey. There is an explicit attempt to engage with the scenario and explicit focus on why pupils are **less** likely to obey, rather than to obey.

3 marks Reasonable analysis of unfamiliar situation

Reasonable explanation that demonstrates knowledge of why pupils are less likely to obey with some attempt to engage with the scenario and some explicit focus on why pupils are **less** likely to obey, rather than to obey.

2 marks Basic analysis of unfamiliar situation

Basic explanation of why pupils are less likely to obey. Or a reasonable explanation but with no engagement with scenario.

1 mark Rudimentary analysis of unfamiliar situation

Rudimentary, muddled, explanation of why people are less likely to obey.

0 marks

No creditworthy material, eg description of why people are **more** likely to obey but with no comparison with **less** likely.

Section C

Question 11

AO2 = 4 marks

(a) When walking to work, Liam has to touch and count every lamp post that he passes or he becomes worried. This sometimes makes him late for work. This behaviour is an example of deviation from social norms. Identify one other definition of abnormality and explain why Liam's behaviour could be considered abnormal according to this definition.

There are two other definitions on the specification and candidates are likely to use one of these, as a case could be made for each of them. However, other relevant definitions are also creditworthy such as the statistical infrequency definition.

1 mark for a correct identification of a definition.

Deviation from ideal mental health. Jahoda suggested six criteria which denote mental health and since Liam does not seem to be mastering the environment, demonstrating personal autonomy, showing a resistance to stress, he is failing to meet some of the criteria. This suggests that he does not have ideal mental health.

Failure to function adequately. The fact that Liam's behaviour is causing him to be late for work suggests that he is not functioning adequately. A general inability to deal with everyday life is one of the features of this definition and behaviours that impact on his ability to work, would meet the criteria for this definition.

There are 3 marks for the explanation, one mark for a brief explanation: eg Liam's behaviour deviates from ideal mental health because he lacks some of the criteria Jahoda said were necessary for good health. With a further 2 marks for an elaboration. For example, Liam doesn't seem to be able to resist stress as he gets worried (1 mark) this suggests that Liam does not have mastery over his environment, that is one of her criteria for ideal mental health (further elaboration for rest of the marks.)

AO2 = 2 marks

(b) Outline a limitation of the definition that you identified in 11(a).

The limitation given must relate to the definition in 11(a). For example, with deviation from ideal mental health, sometimes stress has benefits and some people perform more effectively under small amounts of stress.

Failure to function adequately suggests that Liam is not coping with life. However, it may be that being late is the only problem he has and in all other aspects of his life he is functioning well. This makes the definition very restrictive.

Both definitions also suffer from cultural relativism. As long as the limitation could be applied to the definition given in (b) then credit can be given, thus a more generic comment on cultural relativism is acceptable.

1 mark for a brief outline of the limitation and a further mark for elaboration.

Question 12**AO1 = 6 marks****Describe the psychodynamic approach to psychopathology.**

Candidates can consider the main features of this approach as well as the therapies that are used. The main assumptions include Freud's belief that abnormality came from psychological causes rather than physical causes; that unresolved conflicts between the id, ego and super ego created anxiety, this could be dealt with by the ego's use of defence mechanisms; early childhood experiences shaped later adult life and unconscious motivation were responsible for disorders. Descriptions of the psychosexual stages of development are also creditworthy, however for top band marks there does need to be a link with psychopathology. The techniques used in therapy to access the unconscious could include free association, dream analysis and the use of projective techniques.

An answer that describes therapies alone cannot access marks above Basic. However, if the answer clearly demonstrates the theoretical underpinning of the therapy, then it can access the full range of marks.

If there is no attempt to explain abnormality, a maximum of 3 marks.

6 marks Accurate and reasonably detailed
Accurate and reasonably detailed description that demonstrates sound knowledge and understanding of the psychodynamic approach to psychopathology. There is appropriate selection of material to address the question.
5-4 marks Less detailed but generally accurate
Less detailed but generally accurate description that demonstrates relevant knowledge and understanding of the psychodynamic approach to psychopathology. There is some evidence of selection of material to address the question.
3-2 marks Basic
Basic description that demonstrates some relevant knowledge and understanding of the psychodynamic approach to psychopathology but lacks detail and may be muddled. There is little evidence of selection of material to address the question or no reference to psychopathology.
1 mark Very brief/flawed or inappropriate
The candidate provides a description, which is very brief or flawed and demonstrates very limited knowledge of the psychodynamic approach to psychopathology. Selection and presentation of information is largely or wholly inappropriate.
0 marks
No creditworthy material.

Question 13**AO1 = 4 marks****Outline one or more biological therapies used for treating abnormality.**

Drugs and ECT are the two biological therapies named on the specification, but other therapies such as psychosurgery are also creditworthy.

Candidates can outline drugs in general or refer to specific drugs, but the focus must be on their use as a treatment for abnormality (rather than as a method of stress management). Drugs work by affecting levels of neurotransmitters in the brain and therefore altering behaviour. For example, antipsychotic drugs work by reducing levels of dopamine and increasing levels of serotonin. Antidepressants work by enhancing the action of serotonin.

ECT can be unilateral or bilateral and involves giving the patient a small current to induce a seizure. They are also given a short acting anaesthetic and muscle relaxant. The seizure lasts for about a minute and ECT is usually given three times a week for up to 5 weeks.

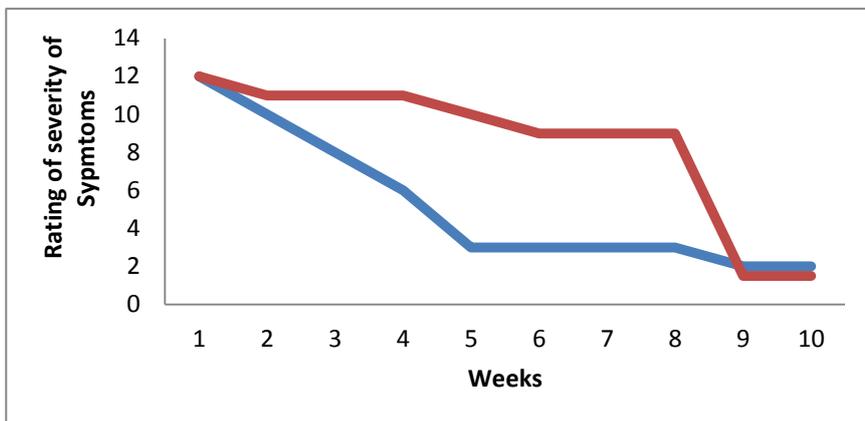
Examiners should be aware that there is a breadth-depth trade off here. Candidates may offer one therapy in depth or more than one but in less depth.

<p>4 marks Accurate and reasonably detailed Accurate and reasonably detailed description that demonstrates sound knowledge and understanding of one or more biological therapies. There is appropriate selection of material to address the question. There may be one therapy in depth or more than one but in less depth.</p>
<p>3 marks Less detailed but generally accurate Less detailed but generally accurate description that demonstrates relevant knowledge and understanding of one or more biological therapies. There is some evidence of selection of material to address the question.</p>
<p>2 marks Basic Basic description that demonstrates some relevant knowledge and understanding of one or more biological therapies, but lacks detail and may be muddled. There is little evidence of selection of material to address the question.</p>
<p>1 mark Very brief/flawed or inappropriate The candidate provides a description, which is very brief or flawed and demonstrates very limited knowledge of biological therapies. Selection and presentation of information is largely or wholly inappropriate.</p>
<p>0 marks No creditworthy material.</p>

Question 14

AO3 = 4 marks - The skill being assessed is interpretation of data from a graph.

A comparison of the effectiveness of two different drugs was conducted over a period of ten weeks. The results are shown in the graph below.



Comparison of the rating of severity of symptoms over 10 weeks

What conclusions about the effectiveness of these two drugs can you draw from the graph?

Possible conclusions could include the following:

- Overall the graph shows is that there is very little difference in the reduction of symptoms of these two drugs by the end of the 10 weeks (1 mark) both drugs are effective (2nd mark)
- Drug A is marginally more effective in reducing the symptoms (1 mark)
- Drug A takes longer before the effects are seen (1 mark), not showing much reduction until after 8 weeks (2nd mark)
- Drug B starts to show a reduction in symptoms quite quickly (1 mark) with a dramatic reduction in the first 5 weeks (2nd mark).

Data on its own is not creditworthy.

Question 15**AO2 = 4 marks**

Amy thinks that whenever she leaves the room her friends start to talk about her, making her feel extremely insecure and very anxious. She has started to worry when she does not get many text messages each day and thinks that her friends do not like her anymore even though they invite her to go out with them.

Describe how cognitive behavioural therapy could be used to help Amy.

CBT aims to change self-defeating beliefs (such as Amy's friends not liking her). This can be done in several ways. One way is through the process of disputing (logical, empirical or pragmatic). The therapist challenges the patient's irrational beliefs and helps them to see that they are indeed irrational. For example, empirical disputing might ask Amy for the evidence to support her beliefs. It might demonstrate that whenever she actually sends a text message her friends always reply straight away.

A slightly less confrontational form of CBT is where the therapist helps the patient identify the negative thoughts (my friends talk about me) and helps them to see alternative ways of assessing the situation (just because I'm not there, it doesn't mean they talk about me). In this way, the therapist can help the patient to engage in a form of reality testing.

For top marks there must be explicit engagement with the stem.

Examiners should be careful not to credit forms of CBT such as SIT, that are more appropriate to stress management unless they are explicitly made relevant to Amy's situation.

4 marks Effective analysis of unfamiliar situation Effective explanation that demonstrates sound knowledge of how CBT could be used to help Amy
3 marks Reasonable analysis of unfamiliar situation Reasonable explanation that demonstrates knowledge of how CBT could be used to help Amy
2 marks Basic analysis of unfamiliar situation Basic explanation of how CBT could be used to help Amy, or reasonable explanation of CBT with no link to the scenario.
1 mark Rudimentary analysis of unfamiliar situation Rudimentary, muddled, explanation of how CBT could be used.
0 marks No creditworthy material.

PSYA2 2014
Assessment Objective Grid

	AO1	AO2	AO3
1	4		
2		4	
3	6	6	
4			4
Total	10	10	4
5	2		
6	4		
7	4		
8			4
9		6	
10		4	
Total	10	10	4
11		6	
12	6		
13	4		
14			4
15		4	
Total	10	10	4