

**General Certificate of Education** 

## **Psychology 1181** Specification A

# Unit 2 (PSYA2)Biological Psychology,Social Psychology andIndividual Differences

# **Mark Scheme**

2010 series - January examination

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

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#### SECTION A: BIOLOGICAL PSYCHOLOGY

#### Question 1

#### AO1 = 3 marks Up to three marks for correct outline of features.

Main features are that the hypothalamus communicates with the pituitary gland, causing it to release ACTH. This hormone is then detected in the bloodstream by the adrenal cortex, which then releases corticosteroids. The corticosteroids have a range of effects, such as causing the liver to release glucose.

An accurate diagram could also receive credit.

1 mark for a brief outline and 3 marks for a correct and coherent outline of the features.

#### Question 2

## AO2 = 4 marks Analysis of unfamiliar situation and application of the effects of stress and the immune system.

#### **QUESTION STEM**

Sandy and Vandita play for the same netball team. Two weeks ago, while playing in a competition, they both grazed their elbows. Vandita's wound is healing well, but Sandy's wound is taking much longer to heal. Sandy is very worried about the plans for her wedding and her forthcoming house move.

There are a variety of different ways to answer this question: credit appropriate alternative answers.

Candidates could focus on critical life events as well as the underlying biological mechanisms. Research has shown that stress reduces the effectiveness of the immune system. People experiencing long-term stress are more likely to become ill and to take longer to heal than those who are not stressed. Sandy is experiencing two events that are on the SRRS and are known to be major stressors.

1 mark for a basic statement of the relationship between stress and the immune system and a further 3 marks for elaboration of this. For full marks, the elaboration must be linked to Sandy's situation. Credit can also be given to research evidence used to support/illustrate the explanation.

4 marks Effective explanation
Effective explanation that demonstrates sound knowledge of the effects of stress and the
immune system as applied to Sandy's wound healing.
3 marks Reasonable explanation
Reasonable explanation that demonstrates knowledge of the effects of stress and the immune
system as applied to wound healing.
2 marks Basic explanation
Basic explanation of the effects of stress and the immune system.
1 mark Rudimentary
Rudimentary, muddled, explanation of stress and the immune system, demonstrating very
limited knowledge.
0 marks
No creditworthy material.

#### Question 3 a

#### AO3 = 2 marks Use and understanding of research methods.

This graph shows a fairly strong negative correlation between stress and white blood cell activity/the immune system. As the stress increases the immune functioning decreases. The following can all receive a mark: direction, strength, and a description of their relationship.

#### Question 3 b

#### AO3 = 4 marks Use and understanding of research methods.

*Strength*: can study relationships between variables that occur naturally, eg stress from exams and students getting ill. Can measure things that cannot be measured experimentally. Can suggest trends that can lead to experiments.

*Weakness*: it is not possible to say that one thing causes another. Just because there is a correlation between stress and the immune system, it does not mean that stress directly caused the immune system to become less effective: there may be another variable connecting the two.

Any other appropriate answer can get credit.

For each, 1 mark for a brief outline of the strength/weakness and a further mark for elaboration.

#### Question 4

## AO1 = 5 marks Knowledge and understanding of personality factors influencing the way people respond to stress.

The specification includes Type A behaviour (TAB), the research based on the study by Friedman & Rosenmann, but candidates may also mention the other types such as Type B, Type C and Type D. They may also include Kobasa's Hardy Personality, or locus of control. Typically, TAB is characterised by aggression and competitiveness. These are people who are driven to succeed and cannot tolerate failure. Such people show a stress response that is much stronger than Type Bs and it also occurs more often. People exhibiting TAB are more likely to suffer CHD.

#### AO1 Knowledge and understanding

#### 5 marks Accurate and reasonably detailed

Accurate and reasonably detailed answer that demonstrates sound knowledge and understanding of personality factors influencing the way people respond to stress. There is appropriate selection of material to address the question.

#### 4 – 3 marks Less detailed but generally accurate

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

#### 2 marks Basic

Basic answer 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.

#### 1 mark Very brief/flawed or inappropriate

Very brief or flawed answer demonstrating very little knowledge. Selection and presentation of information is largely or wholly inappropriate.

#### 0 marks

## AO2 = 6 marks Analysis of unfamiliar situation and application of knowledge of workplace stress.

#### QUESTION STEM

Mr Harris is about to move his business into a brand new building. He is very keen to create a healthy working environment and reduce workplace stress. In this way, he hopes to improve productivity and reduce absenteeism.

For top marks, there needs to be sustained focus on advice and guidance which is underpinned by psychological knowledge. Candidates can consider factors such as noise and temperature. Research has shown that certain types of noise affect memory and can lead to frustration. Other research has shown that as temperature increases, so does aggression, and this can lead to stress. Other factors such as workload, lack of control, relationships with colleagues are also relevant. For example, several studies have shown that lack of control at work can lead to stress. Any relevant factor can be given credit.

Advice could relate to how much control his employees feel they have. Research by Marmot for example; suggest that those with high control over their workload, were less stressed. So Mr Harris should try to allow his employees high decision latitude.

#### 6 marks Effective analysis and application

Effective advice to Mr Harris, using knowledge of psychological research of stress in the workplace, to improve productivity and reduce absenteeism.

5 – 4 marks Reasonable analysis and application

Reasonable advice, using knowledge of psychological research of stress in the workplace

3 – 2 marks Basic analysis and application

Basic advice using knowledge of some psychological research, of stress in the workplace.

#### 1 mark Rudimentary analysis and application

Rudimentary, muddled consideration of stress in the workplace, demonstrating very limited knowledge.

#### 0 marks

#### SECTION B: SOCIAL PSYCHOLOGY

#### Question 6 a

#### AO1 = 2 marks Knowledge of internalisation.

Internalisation is where the behaviour or belief of the majority is accepted by the individual and becomes part of his or her own belief system. It is the most permanent form of conformity.

1 mark for a brief outline and a further mark for elaboration.

#### Question 6 b

#### AO1 = 2 marks Knowledge of compliance.

Compliance is where the individuals change their own behaviour to fit in with the group. They may not necessarily agree with the behaviour/belief but they go along with it publicly.

1 mark for a brief outline and a further mark for elaboration.

#### Question 7 a

#### AO3 = 4 marks Interpretation of data.

Conclusions can include: there are two factors that influence conformity, the ambiguity of the task and the size of the majority. A large majority is most influential with an ambiguous task, but still exerts pressure even when the task is easy. However, a small majority has less effect and the type of task does not seem to be an important variable.

#### 4 marks Accurate and reasonably detailed

Accurate and reasonably detailed answer that demonstrates sound knowledge and understanding of what the bar chart shows about conformity. 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 knowledge and understanding. There is some evidence of material to address the question.

#### 2 marks Basic

Basic answer 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.

#### 1 mark Very brief/flawed of inappropriate

Very brief or flawed answer demonstrating very little knowledge. Selection and presentation of information is largely or wholly inappropriate.

0 marks

No creditworthy material.

#### Question 7 b

#### AO3 = 2 marks Use and knowledge of research methods.

One strength of conducting research in a laboratory is that it allows the experimenter to control the variables, such as group size and difficulty of the task. This manipulation of the IV allows conclusions to be drawn about cause and effect, and what the variables are that influence conformity. One mark for identification of the strength and a further mark for elaboration.

#### Question 8 a

## AO2 = 4 marks Analysis of unfamiliar situation and application of knowledge of independent behaviour and resistance of pressures to conform.

- (i) Petra is showing external locus of control.
- (ii) Dan is showing an internal locus of control.
- (iii) George did not put his name forward as he was obeying his father, someone who he is likely to see as a legitimate authority figure. Candidates could indicate that it was obedience that caused George's behaviour. They might also refer to the influence of an authority figure.

#### Question 8 b

## AO2 = 4 marks Analysis of unfamiliar situation and application of knowledge of resistance to conform.

The student who is most likely to resist pressure to conform is Dan. He has an internal locus of control and research has suggested that those people who believe that they are in control of their environment are less likely to conform. These personality types are much more likely to behave independently. Dan's attributional style allows him to resist the pressure to conform. Another reason could be gender. Males have been shown to be more independent than females.

4 marks Effective explanation
Accurate and reasonably detailed explanation that demonstrates sound knowledge and
understanding of why Dan behaved in this way.
3 marks Reasonable explanation
Less detailed but generally accurate explanation that demonstrates knowledge and
understanding of resistance to conformity.
2 marks Basic
Basic explanation that demonstrates some relevant knowledge and understanding of resistance
to conformity but lacks detail and may be muddled.
1 mark Very brief/flawed of inappropriate
Very brief or flawed answer demonstrating very little knowledge.
0 marks
No creditworthy material.

#### AO1 = 6 marks Knowledge of social change.

There are numerous ways in which candidates can answer this question and examiners should take care to award credit to any answer that is relevant, even if it does not follow the suggestions below.

Note to examiners: all the textbooks have a slightly different slant on this part of the specification, which is not a problem. Accurate and relevant psychology can be credited.

Social change occurs when individuals/small groups change the way the majority thinks and acts. Historically, there have been many examples of such changes: the Suffragette movement, Civil Rights movement, etc. The research into minority influence by such psychologists as Moscovici and more recently Nemeth, has shown how powerful a minority can be, as long as certain conditions are met (eg consistency, confidence, flexibility). It is the minority that usually brings about social change while the majority retains the status quo.

Candidates need to focus on the research (theories and/or studies) that underpin our understanding of social change. Clearly, there is a range of acceptable answers to this question and marks should be given for the effective use of the material.

#### 6 marks Accurate and reasonably detailed

Accurate and reasonably detailed description that demonstrates relevant knowledge and understanding of social change. 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 social change. There is some evidence of material to address the question.

#### 3 – 2 marks Basic

Basic description that demonstrates some relevant knowledge and understanding of social change but lacks detail and may be muddled. There is little evidence of selection of material to address the question.

#### 1 mark Very brief/flawed or inappropriate

The candidate provides a description which is very brief or flawed and demonstrates very limited knowledge of social change.

0 marks

#### SECTION C: INDIVIDUAL DIFFERENCES

**Question 10** 

#### AO1 = 6 marks Knowledge and understanding of definitions of abnormality.

#### AO2 = 6 marks Commentary on definitions of abnormality.

There are three definitions of abnormality named on the specification: deviation from social norms, failure to function adequately and deviation from ideal mental health. However, other definitions are also creditworthy. Candidates could offer several definitions in less detail or two definitions but in more detail, breadth/depth trade off.

However, approaches or models are not creditworthy.

The commentary could consider the strengths and/or limitations of each definition, eg the problems associated with cultural relativism or it could include a generic discussion of the problems of defining abnormality. One limitation of the deviation from social norms definition is that social norms change with time; this is illustrated by the changing views on homosexuality. With the deviation from ideal mental health, there is the problem of cross-cultural variations. A further problem is that the ideals are so demanding that almost everyone would be considered abnormal to some degree. The 'failure to function adequately' definition has the advantage of a more objective measuring scale (eg the GAF). However, it can be criticised as not differentiating sufficiently between abnormal behaviour and unconventional or eccentric behaviour.

A01	A02		
Knowledge and understanding	Application of knowledge and		
	understanding		
6 marks Accurate and reasonably	6 marks Effective evaluation		
detailed	Effective use of material to address the		
Accurate and reasonably detailed	question and provide informed commentary.		
description that demonstrates sound	Effective evaluation of research.		
knowledge and understanding of at least	Broad range of issues and/or evidence in		
two definitions of abnormality.	reasonable depth, or a narrower range in		
There is appropriate selection of material to	greater depth.		
address the question.	Clear expression of ideas, good range of		
	specialist terms, few errors of grammar,		
	punctuation and spelling.		
5 - 4 marks Less detailed but generally	5 - 4 marks Reasonable evaluation		
accurate	Material is not always used effectively but		
Less detailed but generally accurate	produces a reasonable commentary.		
description that demonstrates relevant	Reasonable evaluation of research.		
knowledge and understanding.	A range of issues and/or evidence in limited		
There is some evidence of selection of	depth, or a narrower range in greater depth.		
material to address the question.	Reasonable expression of ideas, a range of		
Partial performance: if only one definition is	specialist terms, some errors of grammar,		
given, accurate and reasonably detailed,	punctuation and spelling.		
max 4 marks.			
	Partial performance: max 4 marks.		

<b>3 - 2 marks Basic</b> 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.	<ul> <li>3 - 2 marks Basic evaluation</li> <li>The use of material provides only a basic commentary.</li> <li>Basic evaluation of research.</li> <li>Superficial consideration of a restricted range of issues and/or evidence.</li> <li>Expression of ideas lacks clarity, some specialist terms used, errors of grammar, punctuation and spelling detract from clarity.</li> </ul>
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.	<ul> <li>1 mark Rudimentary evaluation</li> <li>The use of material provides only a rudimentary commentary.</li> <li>Evaluation of research is just discernible or absent.</li> <li>Expression of ideas poor, few specialist terms used, errors of grammar, punctuation and spelling often obscure the meaning.</li> </ul>
<b>0 marks</b> No creditworthy material.	0 marks No creditworthy material.

## AO1 = 6 marks Knowledge of key features of any two psychological approaches to psychopathology.

Credit is given for an outline of key features and not for identification of an approach.

The approaches stated on the specification are:

*Psychodynamic*. Key features include: mental disorders have a psychological rather than physical cause; unresolved conflicts are the cause, early childhood experiences influence mental disorders, the role of the unconscious is important.

*Behavioural.* Key features include: only overt behaviour is relevant, abnormal behaviour is learned in the same way as normal behaviour, ie through conditioning, the role of the environment.

*Cognitive*. Key features include: abnormality is caused by faulty thinking; in this model, it is the individual who is in control of their own behaviour.

Credit may also be given to any other appropriate <u>psychological</u> approach to psychopathology.

For each approach, 1 mark for a basic outline of a key feature and a further 2 marks for either an elaboration or for further features. Candidates may offer several features in less detail or a few features but in more detail. For full marks, there must be some link to psychopathology.

Reference to therapies would be creditworthy as a feature of the approach.

Candidates who offer the biological approach do not receive any credit.

## AO2 = 6 marks Analysis of unfamiliar situation and application of knowledge of procedures of therapy.

#### QUESTION STEM

Hamish has a phobia of heights. This phobia has now become so bad that he has difficulty in going to his office on the third floor, and he cannot even sit on the top deck of a bus any more. He has decided to try systematic de-sensitisation to help him with his problem.

Main techniques are: firstly, teach deep muscle or progressive relaxation. Then the therapist and client construct an anxiety hierarchy, starting with situations that cause a small amount of fear – in Hamish's case this might be standing on a small stepladder – then listing situations that cause more fear, with the most frightening situation being at the top of the hierarchy, such as standing on top of a mountain. Finally, they work through this list, with the client remaining relaxed at each stage. The two main features are relaxation and working through the anxiety hierarchy.

#### 6 marks Effective explanation

Effective explanation of the main stages of systematic de-sensitisation demonstrating sound knowledge of the therapy as applied to fear of heights.

#### 5-4 marks Reasonable explanation

Reasonable explanation of the main stages of systematic de-sensitisation applied to fear of heights.

3-2 marks Basic explanation

Basic explanation of systematic de-sensitisation with some attempt to apply to fear of heights.

#### 1 mark Very brief/flawed of inappropriate

Rudimentary, muddled explanation of systematic de-sensitisation demonstrating very limited knowledge

#### 0 marks

Question	AO1 Mark	AO2 Mark	AO3 Mark
Biological:			
1	3		
2		4	
3			6
4	5		
5		6	
Total:	8	10	6
Social:			
6	4		
7			6
8		8	
9	6		
Total:	10	8	6
Individual			
Differences:			
10	6	6	
11	6		
12		6	
Total:	12	12	

#### **Assessment Objectives**