

## **General Certificate of Education**

# **Psychology 2181**

Specification A

Unit 4 (PSYA4) Psychopathology,
Psychology in Action
and Research Methods

## **Mark Scheme**

2010 examination - June series

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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## PSYA4: Psychopathology, Psychology in Action and Research Methods

#### SECTION A: PSYCHOPATHOLOGY

#### Question 01

**AO1 = 9 marks** Description of issues surrounding the classification and diagnosis of schizophrenia.

There are many issues surrounding the classification and diagnosis of mental disorders in general, most of which are related in some way to the idea of reliability and validity. It is acceptable to describe overarching issues as long as they have relevance to schizophrenia. However, there are some issues, which are particularly relevant to schizophrenia eg the range of sub-types of schizophrenia and the difficulty of distinguishing between them. For AO1 credit, candidates need to identify some of these issues. For example:

- The reliability of the major classification systems ICD and DSM
- The availability of other diagnostic criteria for schizophrenia eg Schneider criteria
- The lack of homogeneity in schizophrenic symptoms
- The problems of labelling
- The problem of co-morbidity
- The problem of distinguishing schizophrenia from, for example, mood or personality disorders
- The lack of objective tests for schizophrenia
- The difficulty of being able to predict outcome or response to treatment
- Cultural differences in symptom presentation
- The question of whether schizophrenia is a mental disorder at all

Candidates who simply offer lists of signs and symptoms of schizophrenia or who describe classification systems are not really addressing the issues surrounding diagnosis and classification. Such material is rudimentary.

Examiners should be mindful of a depth/breadth trade-off here – candidates can describe a few issues in detail or more issues in less detail.

There is considerable overlap between the issues of classification and diagnosis so partial performance criteria do not apply.

**AO2/3 = 16 marks** Discussion of issues surrounding the classification and diagnosis of schizophrenia including methodological evaluation of the evidence.

Candidates achieve AO2/3 credit by evaluating and offering commentary on the issues they have identified for example considering the consequences arising from the issue. They could discuss the advantages and disadvantages of using classification systems to diagnose schizophrenia. For example, diagnosis might lead to labelling which causes long-term problems for the person with schizophrenia in terms of getting/keeping employment or establishing relationships. On the other hand, careful diagnosis can lead to effective treatment programmes which would, otherwise, not be offered.

#### **AO1 Mark bands**

#### 9-8 marks Sound

Knowledge and understanding are accurate and well detailed.

A good range of relevant material has been selected. There is substantial evidence of breadth/depth. Organisation and structure of the answer are coherent.

#### 7-5 marks Reasonable

Knowledge and understanding are generally accurate and reasonably detailed.

A range of relevant material has been selected. There is evidence of breadth and/or depth. Organisation and structure of the answer are reasonably coherent.

#### 4-3 marks Basic

Knowledge and understanding are basic/relatively superficial.

A restricted range of material has been presented.

Organisation and structure of the answer are basic.

## 2-1 marks Rudimentary

Knowledge and understanding are rudimentary and may be muddled and/or inaccurate.

The material presented may be very brief or largely irrelevant.

Lacks organisation and structure.

## 0 marks

No creditworthy material.

#### AO2/3 Mark bands

#### 16-13 marks Effective

Commentary demonstrates sound analysis and understanding.

The answer is well focused and shows coherent elaboration and/or a clear line of argument. Ideas are well structured and expressed clearly and fluently. Consistently effective use of psychological terminology. Appropriate use of grammar, punctuation and spelling.

#### 12-9 marks Reasonable

Evaluation demonstrates reasonable analysis and understanding.

The answer is generally focused and shows reasonable elaboration and/or a line of argument is evident.

Most ideas appropriately structured and expressed clearly. Appropriate use of psychological terminology. Minor errors of grammar, punctuation and spelling only occasionally compromise meaning.

#### 8-5 marks Basic

Evaluation demonstrates basic, superficial understanding.

The answer is sometimes focused and shows some evidence of elaboration.

Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive.

## 4-1 marks Rudimentary

Evaluation is rudimentary, demonstrating very limited understanding.

The answer is weak, muddled and incomplete. Material is not used effectively and may be mainly irrelevant.

Deficiency in expression of ideas results in confusion and ambiguity. The answer lacks structure, often merely a series of unconnected assertions. Errors of grammar, punctuation and spelling are frequent and intrusive.

#### 0 marks

#### AO1 = 9 marks

Candidates are required to outline at least one biological explanation and at least one psychological explanation of depression. It is acceptable to describe more than one of each type and examiners should be mindful of a depth/breadth trade-off here. However, if candidates describe only one or more biological explanations without describing one or more psychological explanations (or vice versa), partial performance criteria apply.

The main biological explanations of depression are:

- genetic
- biochemical
- neuroanatomical

It is also acceptable to describe the evolutionary approach

Given the difficulty of describing genetic explanations in detail, AO1 credit is given for straight descriptions of twin, family and adoptive studies which support the genetic explanation.

The main psychological explanations are:

- psychoanalytic
- behavioural
- cognitive-behavioural
- socio-cultural

While candidates are required to offer at least one biological and at least one psychological explanation of depression, they do not have to give them exactly equal weighting for full marks. However, an answer which refers mainly to one type of explanation with only a few sentences on the other type of explanation is unlikely to access the top mark band.

## **AO1 Mark bands**

## 9-8 marks Sound

Knowledge and understanding are accurate and well detailed.

A good range of relevant material has been selected. There is substantial evidence of breadth/depth. Organisation and structure of the answer are coherent.

## 7-5 marks Reasonable

Knowledge and understanding are generally accurate and reasonably detailed.

A range of relevant material has been selected. There is evidence of breadth and/or depth Organisation and structure of the answer are reasonably coherent.

Partial performance is sound, accurate and well detailed

N.B. (max. 6 marks)

## 4-3 marks Basic

Knowledge and understanding are basic/relatively superficial.

A restricted range of material has been presented.

Organisation and structure of the answer are basic.

Partial performance is reasonable and generally accurate

## 2-1 marks Rudimentary

Knowledge and understanding are rudimentary and may be muddled and/or inaccurate.

The material presented may be very brief or largely irrelevant.

Lacks organisation and structure.

Partial performance is basic

**0 marks** No creditworthy material.

#### **Question 03**

#### AO2/3 = 16 marks

Candidates are required to evaluate biological and psychological explanations. They can gain AO2/3 credit by considering research that supports and challenges the explanation of the different types of depression and discussing the possibility of different causal factors. A discussion of the diathesis-stress model as a way of combining psychological and biological explanations also constitutes AO2/3 material. While the question is concerned with explanations, the effectiveness of therapies could be used as a means of evaluation.

#### AO2/3 Mark bands

#### 16-13 marks Effective

Evaluation demonstrates sound analysis and understanding.

The answer is well focused and shows coherent elaboration and/or a clear line of argument. Ideas are well structured and expressed clearly and fluently. Consistently effective use of psychological terminology. Appropriate use of grammar, punctuation and spelling.

#### 12-9 marks Reasonable

Evaluation demonstrates reasonable analysis and understanding.

The answer is generally focused and shows reasonable elaboration and/or a line of argument is evident.

Most ideas appropriately structured and expressed clearly. Appropriate use of psychological terminology. Minor errors of grammar, punctuation and spelling only occasionally compromise meaning.

Partial performance demonstrates sound analysis and understanding. It is well focused and shows coherent elaboration and/or a clear line of argument (max. 12 marks)

## 8-5 marks Basic

Analysis and evaluation demonstrate basic, superficial understanding.

The answer is sometimes focused and shows some evidence of elaboration.

Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive.

Partial performance demonstrates reasonable analysis and understanding. It is generally focused and shows reasonable elaboration and/or a line of argument is evident.

## 4-1 marks Rudimentary

Analysis and evaluation is rudimentary, demonstrating very limited understanding.

The answer is weak, muddled and incomplete. Material is not used effectively and may be mainly irrelevant.

Deficiency in expression of ideas results in confusion and ambiguity. The answer lacks structure, often merely a series of unconnected assertions. Errors of grammar, punctuation and spelling are frequent and intrusive.

Partial performance demonstrates basic, superficial understanding. It is sometimes focused and shows some evidence of elaboration.

#### 0 marks

#### AO1 = 4 marks

The outline might include:

- physiological, behavioural, emotional and cognitive signs/symptoms
- incidence and prevalence
- · course and prognosis
- diagnostic criteria

Examiners should bear in mind that there are only 4 marks available here so candidates are not expected to cover all these points to access top marks.

The list of particular clinical characteristics obviously depends on the choice of anxiety disorder. Phobic disorder is an umbrella term covering specific phobias, social phobias and agoraphobia and it is legitimate for candidates to describe just one of these or all three. However, simply naming different types does not meet the requirement of describing the clinical characteristics of the disorder, so cannot attract marks unless there is an accompanying description.

#### AO1 mark band 4 marks

4 marks	Outline is reasonably thorough, accurate and coherent					
3-2 marks	Outline is limited, generally accurate and reasonably coherent					
1 mark	Outline is weak and muddled or very limited					
0 marks	No creditworthy material					

#### **Question 05**

#### AO1 = 5 marks

AO1 is a brief outline of **one** psychological therapy for the chosen anxiety disorder. If candidates outline more than one type of therapy, examiners should look at both accounts and credit the one which attracts most marks. Answers which describe a biological therapy eg drugs attract no credit. The most likely therapy is some form of behavioural therapy eg systematic desensitisation or implosion for phobias, or for OCD, ERP or modelling.

#### AO1 marks

5 – 4 marks	Outline is accurate and coherent				
3 – 2 marks	Outline is limited, generally accurate and reasonably coherent				
1 mark	Outline is weak and muddled or very limited				
0 marks	No creditworthy material				

#### **Question 06**

#### AO2/3 = 16 marks

Candidates are required to evaluate psychological therapies appropriate for the anxiety disorder outlined in 04. Because evaluation can be very generic, partial performance criteria do not apply. They are likely to consider issues such as appropriateness and effectiveness of the therapies. They can also consider the quality of the research evidence which supports the therapies.

#### AO2/3 Mark bands

#### 16-13 marks Effective

Evaluation demonstrates sound analysis and understanding.

The answer is well focused and shows coherent elaboration and/or a clear line of argument. Ideas are well structured and expressed clearly and fluently. Consistently effective use of psychological terminology. Appropriate use of grammar, punctuation and spelling.

#### 12-9 marks Reasonable

Evaluation demonstrates reasonable analysis and understanding.

The answer is generally focused and shows reasonable elaboration and/or a line of argument is evident.

Most ideas appropriately structured and expressed clearly. Appropriate use of psychological terminology. Minor errors of grammar, punctuation and spelling only occasionally compromise meaning.

#### 8-5 marks Basic

Analysis and evaluation demonstrate basic, superficial understanding.

The answer is sometimes focused and shows some evidence of elaboration.

Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive.

## 4-1 marks Rudimentary

Analysis and evaluation is rudimentary, demonstrating very limited understanding.

The answer is weak, muddled and incomplete. Material is not used effectively and may be mainly irrelevant.

Deficiency in expression of ideas results in confusion and ambiguity. The answer lacks structure, often merely a series of unconnected assertions. Errors of grammar, punctuation and spelling are frequent and intrusive.

## 0 marks

#### **SECTION B: PSYCHOLOGY IN ACTION**

#### **Question 07**

#### AO1 = 5 marks

Introductory material on what is meant by media influence and anti-social behaviour can gain some AO1 credit but the emphasis here is on describing findings of psychological research into media influences on anti-social behaviour. The question is focused on anti-social behaviour so material on pro-social behaviour does not attract AO1 credit. However, if material on pro-social behaviour is used as sustained commentary/evaluation, it can attract AO2 credit.

#### AO2 = 6 marks

Candidates are required to evaluate psychological research into media influences on anti-social behaviour.

Commentary on research is likely to focus on limitations of:

- methodological issues (particularly associated with limitations of correlational research and operationalisation and controlling variables).
- Ethical issues.
- Comparison of findings from different research methods/settings.
- How research relates to theory/models.
- Implications of the research for real world application.

#### AO1 marks

5 – 4 marks	Outline is accurate and coherent
3 – 2 marks	Outline is limited, generally accurate and reasonably coherent
1 mark	Outline is weak and muddled or very limited
0 marks	No creditworthy material

#### AO2/3 Mark bands – 6 marks

#### 6 marks Effective

Commentary demonstrates sound analysis and understanding.

Application of knowledge is effective and shows coherent elaboration.

Ideas are well structured and expressed clearly and fluently. Consistently effective use of psychological terminology. Appropriate use of grammar, punctuation and spelling.

#### 5-4 marks Reasonable

Commentary demonstrates reasonable analysis and understanding.

Application of knowledge is reasonably effective and shows some elaboration.

Most ideas appropriately structured and expressed clearly. Appropriate use of psychological terminology. Minor errors of grammar, punctuation and spelling only occasionally compromise meaning.

#### 3-2 marks Basic

Commentary demonstrates basic, superficial understanding.

Application of knowledge is basic.

Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive.

## 1 mark Rudimentary

Commentary is rudimentary demonstrating very limited understanding.

Application of knowledge is weak, muddled and may be mainly irrelevant.

Deficiency in expression of ideas results in confusion and ambiguity.

The answer lacks structure, often merely a series of unconnected assertions.

Errors of grammar, punctuation and spelling are frequent and intrusive.

**0 marks** No creditworthy material is presented.

#### Question 08

#### AO1 = 4 marks

Candidates are required to identify some of the factors that might be important in trying to persuade young people to apply for particular courses. They might consider the Hovland-Yale model of persuasion and outline factors such as:

- the source of the message
- the content of the message
- · the medium in which it is transmitted
- the target audience

They might also identify factors such as age, gender and status or describe the sequential process of attitude change which involves attention, comprehension, reactance and acceptance

Any appropriate and relevant factors are creditworthy.

Examiners should bear in mind that there are only 4 marks available for the AO1 material so candidates could gain full marks for 2 or 3 factors with elaboration or for naming 4 factors (as above).

## **Question 09**

#### AO2/AO3 = 10 marks

Candidates are required to explain how factors such as those listed above might help to persuade young people to apply for particular courses. To attract full marks, they need to use their knowledge of psychological research into persuasion/attitude change in an applied context and relate their answers to the scenario in the question. If candidates do not apply their knowledge to the stem they can only achieve a maximum of 5 marks.

#### AO2/3 mark bands 10 marks

#### 10-9 marks Effective

Explanation demonstrates sound analysis and understanding.

The answer is well focused and shows coherent elaboration and/or a clear line of argument. Ideas are well structured and expressed clearly and fluently. Consistently effective use of psychological terminology. Appropriate use of grammar, punctuation and spelling.

#### 8-6 marks Reasonable

Explanation demonstrates reasonable analysis and understanding.

The answer is generally focused and shows reasonable elaboration and/or a line of argument is evident.

Most ideas appropriately structured and expressed clearly. Appropriate use of psychological terminology. Minor errors of grammar, punctuation and spelling only occasionally compromise meaning.

#### 5-3 marks Basic

Explanation demonstrates basic, superficial understanding.

The answer is sometimes focused and shows some evidence of elaboration.

Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive.

## 2-1 marks Rudimentary

Explanation is rudimentary demonstrating very limited understanding.

The answer is weak, muddled and incomplete. Material is not used effectively and may be mainly irrelevant.

Deficiency in expression of ideas results in confusion and ambiguity. The answer lacks structure, often merely a series of unconnected assertions. Errors of grammar, punctuation and spelling are frequent and intrusive.

0 marks No creditworthy material is presented

#### **Question 10**

#### AO2 = 6 marks

The scenario contains references to a number of factors associated with smoking addiction ie low self-esteem, dieting in females, role models who smoke. Candidates could elaborate on how these factors would influence vulnerability to addiction; they could also suggest other appropriate factors eg external locus of control. Explanations of any appropriate factors are creditworthy.

#### AO2 mark bands 6 marks

#### 6 marks Effective

Explanation demonstrates sound analysis and understanding.

The answer is well focused and shows coherent elaboration.

Ideas are well structured and expressed clearly and fluently. Consistently effective use of psychological terminology. Appropriate use of grammar, punctuation and spelling.

#### 5-4 marks Reasonable

Explanation demonstrates reasonable analysis and understanding.

The answer is generally focused and shows reasonable elaboration.

Most ideas appropriately structured and expressed clearly. Appropriate use of psychological terminology. Minor errors of grammar, punctuation and spelling only occasionally compromise meaning.

#### 3-2 marks Basic

Explanation demonstrates basic, superficial understanding.

The answer is sometimes focused and shows some evidence of elaboration.

Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive.

## 1 mark Rudimentary

Explanation is rudimentary demonstrating very limited understanding.

The answer is weak, muddled and may be mainly irrelevant.

Deficiency in expression of ideas results in confusion and ambiguity. The answer lacks structure, often merely a series of unconnected assertions. Errors of grammar, punctuation and spelling are frequent and intrusive.

## 0 marks

#### AO1 = 5 marks

Candidates are simply required to outline the theory of reasoned action.

This was first proposed by Fishbein and Ajzen and offers a way of understanding the factors involved in how people decide on their actions eg to start drinking/ smoking/ gambling in the first place or to give the habit up. It consists of three general components

- attitude
- subjective norm
- behavioural intention

There is no requirement here to evaluate the theory

## AO1 mark band 5 marks

5 – 4 marks	Outline is accurate and coherent
3 – 2 marks	Outline is limited, generally accurate and reasonably coherent
1 mark	Outline is weak and muddled or very limited
0 marks	No creditworthy material

#### **Question 12**

#### AO1 = 4 marks

Candidates are required to outline two examples of public health intervention for AO1 credit. There are only 4 marks available here so examiners should not expect too much detail. Public health interventions include:

- advice from GPs
- workplace interventions
- · public health advertising campaigns

There is considerable overlap between public health interventions and legislation so candidates can also gain credit by outlining areas such as:

- restricting/banning advertising
- increasing the cost of alcohol/cigarettes
- controlling, or even banning, sales
- banning smoking in enclosed public places

If only one example is outlined, a maximum of 2 marks.

For full marks, each example needs to be a bit more than just naming/identifying.

#### AO2/3 = 10 marks

The question requires assessment of the effectiveness of public health interventions and/or legislation. Candidates may approach this in a number of ways such as:

- research evidence to support effectiveness.
- Difficulty in assessing impact, in particular isolating the effect of intervention and/or legislation.
- Comparison of different interventions and/or legislation.
- Appropriateness of intervention and/or legislation for target population and nature of behaviour to be changed.

Credit other relevant approaches to assessing the effectiveness of public health intervention and/or legislation.

## 10-9 marks Effective

Evaluation demonstrates sound analysis and understanding.

The answer is well focused and shows coherent elaboration and/or a clear line of argument. Ideas are well structured and expressed clearly and fluently. Consistently effective use of psychological terminology. Appropriate use of grammar, punctuation and spelling.

#### 8-6 marks Reasonable

Evaluation demonstrates reasonable analysis and understanding.

The answer is generally focused and shows reasonable elaboration and/or a line of argument is evident.

Most ideas appropriately structured and expressed clearly. Appropriate use of psychological terminology. Minor errors of grammar, punctuation and spelling only occasionally compromise meaning.

## 5-3 marks Basic

Analysis and evaluation demonstrate basic, superficial understanding.

The answer is sometimes focused and shows some evidence of elaboration.

Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive.

## 2-1 marks Rudimentary

Analysis and evaluation is rudimentary, demonstrating very limited understanding.

The answer is weak, muddled and incomplete. Material is not used effectively and may be mainly irrelevant.

Deficiency in expression of ideas results in confusion and ambiguity. The answer lacks structure, often merely a series of unconnected assertions. Errors of grammar, punctuation and spelling are frequent and intrusive.

#### AO1 = 5 marks

This question requires candidates to show their understanding of pseudoscience.

Pseudoscience actually means 'false science'. Pseudoscientific explanations can be difficult to identify because they are presented as being scientific even though they do not meet the criteria for true science.

Some of the main characteristics of pseudoscience are as follows:

- pseudoscience is not published in peer-reviewed journals but often appears in magazines, newspapers or on the internet
- investigations, where they are carried out at all, are often methodologically flawed and not replicable
- specialist terms such as 'energy' or 'aura' are often used vaguely with no clearly operationalised definition
- theories are usually unfalsifiable
- there is no obvious progress in the accumulation of knowledge
- evidence is not sound and arguments are frequently based on emotion or intuition rather than logical reasoning
- counter-evidence presented by sceptics is usually dismissed
- practitioners of pseudoscience often promote products such as 'cures' or self-help books which have no support from scientific research.

There are only 5 marks available here so candidates are not expected to address all of these issues to access full marks.

#### AO1 marks

5 – 4 marks	Outline is accurate and coherent
3 – 2 marks	Outline is limited, generally accurate and reasonably coherent
1 mark	Outline is weak and muddled or very limited
0 marks	No creditworthy material

## **Question 15**

### AO2/3 marks = 6 marks

This requires candidates to provide an explanation of how the Ganzfeld procedure could be used to investigate the ability to read the thoughts of another person.

The Ganzfeld procedure is a technique that has been developed to test an individual's ability to read the thoughts of another person. It subjects the individual (called the 'receiver') to a form of sensory deprivation during which patterned sensory input, both visual and auditory, is prevented. During this period of sensory deprivation, another individual (called the 'sender') observes a randomly selected target and tries to send an image of this target mentally to the receiver. The receiver can speak during this period and the experimenter, who should be blind to the target, records what is said. At the end of the deprivation period, the receiver is asked to select the target from a set of images which includes distractor images (usually 3 decoys). If the receiver is really able to read the thoughts of others, he/she should be able, over several trials, to pick the target correctly at greater than chance level.

#### AO2/3 6 marks

#### 6 marks Effective

Explanation demonstrates sound analysis and understanding.

The answer is well focused and shows coherent elaboration.

Ideas are well structured and expressed clearly and fluently. Consistently effective use of psychological terminology. Appropriate use of grammar, punctuation and spelling.

#### 5-4 marks Reasonable

Explanation demonstrates reasonable analysis and understanding.

The answer is generally focused and shows reasonable elaboration.

Most ideas appropriately structured and expressed clearly. Appropriate use of psychological terminology. Minor errors of grammar, punctuation and spelling only occasionally compromise meaning.

#### 3-2 marks Basic

Explanation demonstrates basic, superficial understanding.

The answer is sometimes focused and shows some evidence of elaboration.

Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive.

## 1 mark Rudimentary

Explanation is rudimentary demonstrating very limited understanding.

The answer is weak, muddled and may be mainly irrelevant.

Deficiency in expression of ideas results in confusion and ambiguity. The answer lacks structure, often merely a series of unconnected assertions. Errors of grammar, punctuation and spelling are frequent and intrusive.

**0 marks** No creditworthy material is presented

### **Question 16**

#### AO1 = 4 marks

This requires candidates to outline factors underlying belief in anomalous experience. Several factors have been identified which seem to contribute to vulnerability to belief in the paranormal. For example:

- Poor performance on tests of critical thinking
- Systematic errors in deductive reasoning
- Weak probabilistic reasoning
- Biased concepts of randomness and meaningfulness
- Memory bias for apparent paranormal experiences
- Non-conscious processing of information which is later perceived to stem from precognition
- Heightened sensitivity to environmental cues (eg changes in light, temperature, magnetic field etc) which might then be interpreted as paranormal phenomena
- Perceptual bias (eg misinterpreting stimuli seen in less than optimal viewing conditions

Any appropriate factors are creditworthy. For example, it has even been suggested that 'believers' have over-activated right hemisphere processing compared to non-believers.

Candidates who outline only 1 factor can achieve a maximum of 2 marks.

#### AO2/3 = 10 marks

This requires candidates to apply their knowledge to consider how factors such as those identified in **1 6** help us to understand belief in psychic mediumship. Answers are likely to focus on:

- Explaining how factors contribute to understanding belief in psychic mediumship eg poor probabilistic reasoning might lead to a belief in psychic mediumship.
- Relevant research evidence that supports or challenges such an explanation.
- Comparison of the effectiveness of different factors/explanations.
- Implications of factors.

Credit other relevant material that addresses how factors contribute to understanding of psychic mediumship.

There should be a depth/breadth trade off. To access top band marks, candidates are expected to refer to relevant psychological research findings.

#### AO2/3 10 marks

10-9 marks	Explanation demonstrates sound analysis and understanding.
Effective	The answer is well focused and shows coherent elaboration and/or a clear line
	of argument.
	Ideas are well structured and expressed clearly and fluently. Consistently
	effective use of psychological terminology. Appropriate use of grammar,
	punctuation and spelling.
8-6 marks	Explanation demonstrates reasonable analysis and understanding.
Reasonable	The answer is generally focused and shows reasonable elaboration and/or a
	line of argument is evident.
	Most ideas appropriately structured and expressed clearly. Appropriate
	Use of psychological terminology. Minor errors of grammar, punctuation and
	spelling only occasionally compromise meaning.
5-3 marks	Explanation demonstrates basic, superficial understanding.
Basic	The answer is sometimes focused and shows some evidence of elaboration.
	Expression of ideas lacks clarity. Limited use of psychological terminology.
	Errors of grammar, punctuation and spelling are intrusive.
2-1 marks	Explanation is rudimentary, demonstrating very limited understanding.
Rudimentary	The answer is weak, muddled and incomplete. Material is not used effectively
	and may be mainly irrelevant.
	Deficiency in expression of ideas results in confusion and ambiguity. The
	answer lacks structure, often merely a series of unconnected assertions.
	Errors of grammar, punctuation and spelling are frequent and intrusive.
0 marks	No creditworthy material is presented

#### SECTION C: PSYCHOLOGICAL RESEARCH AND SCIENTIFIC METHOD

#### **Question 18**

#### AO1 = 2 marks

Peer review is the process by which psychological research papers, before publication, are subjected to independent scrutiny by other psychologists working in a similar field who consider the research in terms of its validity, significance and originality.

0 marks for 'other psychologists look at the research'.

1 mark for a very brief outline eg 'other psychologists look at the research report before it is published.'

One further mark for elaboration

#### **Question 19**

#### AO2/3= 5 marks

Peer review is an important part of this process because it provides a way of checking the validity of the research, making a judgement about the credibility of the research and assessing the quality and appropriateness of the design and methodology. Peers are also in a position to judge the importance or significance of the research in a wider context. They can also assess how original the work is and whether it refers to relevant research by other psychologists. They can then make a recommendation as to whether the research paper should be published in its original form, rejected or revised in some way. This peer review process helps to ensure that any research paper published in a well-respected journal has integrity and can, therefore, be taken seriously by fellow researchers and by lay people.

## AO2/3 marks

## 5 marks Effective

Effective analysis and understanding.

The answer is well focused and shows coherent elaboration.

Ideas are well structured and expressed clearly and fluently. Consistently effective use of psychological terminology. Appropriate use of grammar, punctuation and spelling.

#### 4-3 marks Reasonable

Reasonable analysis and understanding.

The answer is generally focused and shows reasonable elaboration.

Most ideas appropriately structured and expressed clearly. Appropriate use of psychological terminology. Minor errors of grammar, punctuation and spelling only occasionally compromise meaning.

## 2 marks Basic

Basic, superficial understanding.

The answer is sometimes focused and shows some evidence of elaboration.

Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive.

## 1 mark Rudimentary

Rudimentary with very limited understanding.

The answer is weak, muddled and may be mainly irrelevant.

Deficiency in expression of ideas results in confusion and ambiguity. The answer lacks structure, often merely a series of unconnected assertions. Errors of grammar, punctuation and spelling are frequent and intrusive.

#### 0 marks

No creditworthy material is presented.

#### **Question 20**

#### **Question Stem**

A psychologist was interested in looking at the effects of a restricted diet on psychological functioning. A group of 20 healthy, young adult volunteers agreed to spend four weeks in a research unit. They were kept warm and comfortable but given only water and small amounts of plain food. They were able to socialise with one another and watch television but they had to keep to strict, set mealtimes and were not allowed to eat anything between meals. The psychologist carried out various tests of emotional and cognitive functioning during this four week period. One area of interest for the psychologist was the effect of the dietary restriction on the perception of food. He tested this by asking the volunteers to draw pictures of food at the end of each week. When all the drawings had been completed, the psychologist used content analysis to analyse them.

#### AO1 = 1 mark

A brief definition of the term is sufficient for 1 mark eg a technique for analysing data according to themes or categories.

Candidates who simply write 'a way of analysing qualitative data' are not meeting the requirement to say 'what is meant by....?'

#### **Question 21**

#### AO2/3 = 3 marks

- The psychologist would have identified a number of categories or themes by which to sort the drawings. Such categories/themes might include: the type of food depicted eg carbohydrate, protein; the state of the food eg cooked, raw etc; the portion size; the brightness of the colours used.
- He would have counted examples from each category to provide quantitative data.
- He could then compare the drawings according to these categories to see if there were changes over the 4 week period.

For full marks candidates can either outline three of the above <u>or</u> outline two with some elaboration.

For 2 marks candidates can either outline two of the above, or one with elaboration. For 1 mark candidates simply outline one of the above eg "choose a theme like size".

Note: maximum 2 marks if no engagement with the stem.

#### **Question Stem**

The psychologist needed to be sure that his participants understood the nature of the study so that they were able to give informed consent. Write a consent form which would be suitable for this study. Make sure that there is sufficient information about the study for the participants to make an informed decision.

The form would need to contain sufficient information for the participant to make an informed decision about whether to take part or not. The form should contain some of the following:

- The purpose of the study
- The length of time required of the participants
- The fact that participants would have to be isolated in a research institute for the duration of the study
- Details about the diet
- Right to withdraw
- Reassurance about protection from harm e.g. the availability of medical supervision
- The requirement to undertake a series of psychological tests
- Reassurance about confidentiality of the data

It is not necessary for candidates to include all of the above points for full marks. However, in order to access the top band, candidates must engage with the study and include sufficient information on both ethical and methodological issues for participants to make an informed decision.

Maximum of 3 marks if no ethical issues are included.

## AO2/3 = 5 marks

#### 5 marks Effective

The 'consent form' demonstrates sound understanding. Information is given in a clear and concise form and is explicitly relevant. The form includes sufficient information so that participants can make a fully informed decision including the right to withdraw.

## 4-3 marks Reasonable

The 'consent form' demonstrates reasonable understanding. Information is given in a reasonably clear and concise form and is mainly relevant. The form includes sufficient information so that participants can make an informed decision.

## 2 marks Basic

The 'consent form' demonstrates basic understanding. There is some lack of clarity and conciseness and material is not always relevant. There are some omissions such that participants would find it difficult to make a decision.

## 1 mark Rudimentary

The 'consent form' is rudimentary and demonstrates very little understanding. Information is not given in a clear and concise form. The form has significant omissions such that a decision is not possible.

## 0 marks

#### **Question Stem**

The psychologist was also interested in the effects of a restricted diet on memory functioning and he expected memory to become impaired. His hypothesis was as follows:

Participants' scores on a memory test are lower after a restricted diet than before a restricted diet.

He gave the volunteers a memory test when they first arrived in the research unit and a similar test at the end of the 4 week period. He recorded the memory scores on both tests and analysed them using the Wilcoxon test. He set his significance level at 5%.

His calculated value was T = 53

#### AO2/3 1 mark

1 mark for correct answer – directional (one-tailed is acceptable)

#### **Question 24**

#### AO2/3 3 marks

1 mark for correctly stating that the result is significant

2 further marks for an explanation: the calculated value of T =53 which is less than the critical value of 60 where N = 20 and p  $\leq$  0.05 for a one-tailed test.

If the candidate states that the result is not significant, no marks can be awarded.

#### **Question 25**

#### **Question Stem**

A psychologist uses the observational method to look at verbal aggression in a group of schoolchildren with behavioural difficulties. Pairs of observers watch a single child in the class for a period of one hour and note the number of verbally aggressive acts within ten-minute time intervals. After seeing the first set of ratings, the psychologist becomes concerned about the quality of inter-rater reliability. The tally chart for the two observers is shown in the table below:

Table 2: Observation of one child - number of verbally aggressive acts in ten-minute time slots

Time slots	0-10	11-20	21-30	31-40	41-50	51-60
Observer A	2	5	0	6	4	3
Observer B	4	3	2	1	6	5

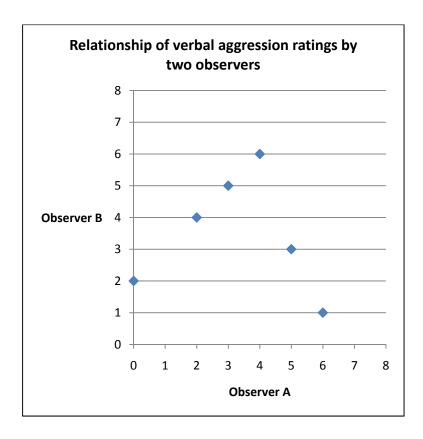
#### AO2/3 = 4 marks

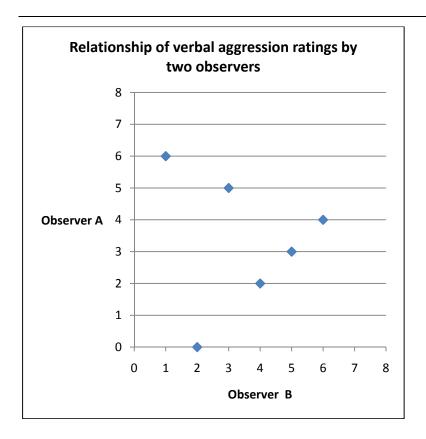
For any credit, candidates must sketch a scattergram.

For full marks, candidates should provide an appropriate title for the scattergram, label each of the axes appropriately and plot the data accurately on the scattergram.

Each of the examples on page 21 is a full mark answer because:

- it is clearly a sketch of a scattergram
- the data are appropriately plotted
- the labels of the axes and the title taken together show full understanding of the nature of the data.





#### AO2/3 = 4 marks

For full marks, candidates should give a reasonably detailed explanation eg she is concerned because the observers should both recognise the same types of verbal behaviour as aggressive and you would expect their tallies to be very similar. In this case, the observers disagree in every 10 minute time interval even though they are both watching the same child and should be using the same criteria. In some time slots, there is a really big difference in the number of acts. This suggests that the observers have interpreted the criteria differently or that, at certain times, one observer was more vigilant then the other (4 marks).

- 1 mark 'because the observers do not agree with each other'.
- 3 further marks for elaboration.

Candidates who simply describe what is meant by inter-rate reliability can gain no marks.

#### AO2/3 = 3 marks

1 mark for identifying the appropriate test – Spearman's Rho or Pearson's (with appropriate justification).

2 further marks for explaining why it is appropriate ie the psychologist is testing for a correlation and the data that can be treated as ordinal.

Candidates can gain no marks on this question if their choice of statistical test is inappropriate.

#### **Question 28**

#### AO2/3 = 4 marks

1 mark for a very brief answer eg 'better training for the observers'

3 further marks for elaboration.

There is a breadth/depth trade-off here. Candidates can elaborate on one improvement eg explain how the training might be improved or outline several improvements in less detail eg establish clearer criteria for categorising verbal aggression, filming the child so that the observers can practise the categorisation.

## ASSESSMENT GRID: PSYA4

Question	AO1	AO2/3	Total
1	9	16	
Total Q1	9	16	25
2	9		
3		16	
Total Q2	9	16	25
4	4		
5	5		
6		16	
Total Q3	9	16	25
7	5	6/0	
8	4		
9		10	
Total Q4	9	16	25
10		5/0	
11	5		
12	4	11	
Total Q5	9	16	25
14	5		
15		5/0	
16	4		
17		11	
Total Q6	9	16	25
18	2		
19		5	
20	1		
21		3	
22		3 5	
23		1	
24		3	
25		4	
26		4	
27		3	
28		4	
Total Q7	3	32	35