



**General Certificate of Education**

**Psychology 2186**

*Specification B*

**Unit 3 (PSYB3) Child Development and  
Applied Options**

**Mark Scheme**

*2010 examination – January 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.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' 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 to download from the AQA Website: [www.aqa.org.uk](http://www.aqa.org.uk)

Copyright © 2010 AQA and its licensors. All rights reserved.

#### COPYRIGHT

AQA retains the copyright on all its publications. However, registered centres for AQA are permitted to copy material from this booklet for their own internal use, with the following important exception: AQA cannot give permission to centres to photocopy any material that is acknowledged to a third party even for internal use within the centre.

Set and published by the Assessment and Qualifications Alliance.

## PSYB3

### Quality of Written Communication

Candidates are required to:

- select and use a form and style of writing appropriate to purpose and to complex subject matter;
- organise relevant information clearly and coherently, using specialist vocabulary where appropriate;
- ensure spelling, grammar and punctuation are accurate, so that meaning is clear.

The assessment criteria for quality of written communication apply only to questions with 12 marks in A2 unit test questions. The following criteria should be applied in conjunction with the question mark scheme.

The bands for quality of written communication must be regarded as part of the mark scheme even though they are listed separately. If a candidate's quality of written communication fails to meet the achieved content band, then s/he will lose one mark.

#### **Band 1: Excellent quality of written communication**

The candidate expresses most ideas clearly and fluently, with consistently effective use of psychological terminology. Arguments are well structured, with appropriate use of sentences and paragraphs. There are few, if any, minor errors of grammar, punctuation and spelling. The overall quality of language is such that meaning is rarely, if ever, obscured.

#### **Band 2: Good to average quality of written communication**

The candidate expresses most ideas clearly and makes some appropriate use of psychological terminology. The answer is organised, using sentences and paragraphs. Errors of grammar, punctuation and spelling may be present but are mostly minor, such that they obscure meaning only occasionally.

#### **Band 3: Average to poor quality of written communication**

The candidate expresses basic ideas clearly but there may be some ambiguity. The candidate uses key psychological terminology inappropriately on some occasions. The answer may lack structure, although there is some evidence of use of sentences and paragraphs. There are occasional intrusive errors of grammar, punctuation and spelling which obscure meaning.

#### **Band 4: Poor quality of written communication**

The candidate shows deficiencies in expression of ideas resulting in frequent confusion and/or ambiguity. Answers lack structure, consisting of a series of unconnected ideas. Psychological terminology is used occasionally, although not always appropriately. Errors of grammar, punctuation and spelling are frequent, intrusive and often obscure meaning.

**Note:** The main body of the answer should be assessed for Quality of Written Communication. Neither a sketched plan at the start of an answer, nor a list of points at the end of an answer where a candidate has clearly run out of time, should be assessed for quality of written communication.

**SECTION A: CHILD DEVELOPMENT****1**

- |     |     |   |                  |
|-----|-----|---|------------------|
| (a) | (i) | Describe <b>one</b> method psychologists have used to measure attachment. | <i>(3 marks)</i> |
|-----|-----|---|------------------|

**[AO1 = 3]**

**AO1** Up to three marks for description of a valid method. Most candidates will focus on the Strange Situation experiment however other methods, such as Main's Adult Attachment Interview (AAI) and the Attachment Q-sort, should be credited. Award marks according to detail although candidates are not expected to refer to the full sequence of events in the Strange Situation for full marks. Can allow 1 mark for naming Strange Situation (or other method). If using SS must refer to presence of stranger in room for maximum marks.

- |     |      |   |                  |
|-----|------|---|------------------|
| (a) | (ii) | Briefly evaluate the method that you have described in your answer to (a)(i). | <i>(3 marks)</i> |
|-----|------|---|------------------|

**[AO3 = 3]**

**AO3** Up to three marks for evaluation of the method described. Points will vary according to the method described. Candidates may focus on two or more issues very briefly or may choose to elaborate on a single issue. Possible issues: reliability, validity, cultural specificity, use of evidence; limited focus – mother only; adequacy of category system etc. One mark for a relevant point that is very brief or muddled.

- |     |  |
|-----|--|
| (b) | Charlie who is eight years old has just started at a new school where he does not know any of the other children. At play-time, he finds that lots of children want to play with him. When his mother comes to pick him up, she tells the teacher, "I hope Charlie was all right today. He usually finds it easy to make friends. He is very popular." |
|-----|--|

Using your knowledge of psychology, suggest **two** likely causes of Charlie's popularity.

*(2 marks)*

**[AO2 = 2]**

**AO2** One mark for each valid cause – accept causes that might apply in this situation ie new school. Causes of popularity that have been identified in research or theory include: physical attractiveness; high status; similarity; socially skilled; co-operative play. Accept absence of negative characteristics eg not aggressive.

- |  |
|--|
| (c) Discuss the possible consequences of privation. Refer to the Romanian orphan studies in your answer. <span style="float: right;">(12 marks)</span> |
|--|

**[AO1 = 4, AO2 = 8]**

- AO1** Up to 4 marks for knowledge of the effects of privation and of the Romanian orphan research. Possible content can be derived from studies of human privation eg Koluchova (twins) and Curtiss (Genie) and the work of the ERA team or from animal research eg Harlow. Possible effects: delayed development; low IQ; language/cognitive deficits; restricted growth; delinquency/aggressiveness; affectionless behaviour; disinhibited attachment; inability to form relationships; mental health problems; quasi-autistic symptoms; inability to mate; poor mothering etc. Up to 2 marks for description of relevant evidence.
- AO2** Up to 8 marks for discussion/analysis/evaluation. Possible issues: short v long-term outcomes; possibility of developmental catch-up; mediating factors eg benefits for the adoptees of substitute care; quality of substitute care; the issue of a critical period ie adoption prior to 6 months versus later adoption; comparison of early ERA outcomes with long-term follow-up data; uniqueness of circumstances; evaluation of evidence. Credit analysis of difference between privation and deprivation if linked to the discussion.

**Maximum 8 marks if no reference to Romanian orphans**

## Mark Bands

### 12 - 10 marks

#### **Excellent answers**

The possible consequences of privation are thoroughly described, showing sound and accurate knowledge and understanding. Discussion is full and well balanced, with appropriate analysis and application. Any references to research are accurate. Evaluative comment is not simply stated but is presented in the context of the discussion as a whole. The answer is well focused, organised and mostly relevant with little, if any, misunderstanding.

The candidate expresses most ideas clearly and fluently, with consistently effective use of psychological terminology. Arguments are well structured, with appropriate use of sentences and paragraphs. There are few, if any, minor errors of grammar, punctuation and spelling. The overall quality of language is such that meaning is rarely, if ever, obscured.

### 9 - 7 marks

#### **Good to average answers**

Answer shows knowledge and understanding of the possible consequences of privation and there is an attempt to present an organised evaluation. Some discussion/analysis/application is evident and the answer is mostly focused on the question, although there may be some irrelevance and/or misunderstanding. Any references to research are relevant but are perhaps not linked so clearly to the discussion as for the top band.

The candidate expresses most ideas clearly and makes some appropriate use of psychological terminology. The answer is organised, using sentences and paragraphs. Errors of grammar, punctuation and spelling may be present but are mostly minor, such that they obscure meaning only occasionally.

### 6 – 4 marks

#### **Average to poor answers**

Answer shows some knowledge and understanding of the possible consequences of privation. Answers in this band are likely to be mostly descriptive and there is likely to be irrelevance and/or inaccuracy. Answers constituting reasonable description with minimal focus on the question are likely to be in this band. For 5/6 marks there must be some discussion/analysis/application.

The candidate expresses basic ideas clearly but there may be some ambiguity. The candidate uses key psychological terminology inappropriately on some occasions. The answer may lack structure, although there is some evidence of use of sentences and paragraphs. There are occasional intrusive errors of grammar, punctuation and spelling which obscure meaning.

**3 – 1 marks**

**Poor answers**

Answer must have some relevant content, perhaps fair description related to the question. There are probably substantial inaccuracies and/or irrelevance. A valid but extremely brief, perhaps unfinished, answer will come into this band.

The candidate shows deficiencies in expression of ideas resulting in frequent confusion and/or ambiguity. Answers lack structure, consisting of a series of unconnected ideas. Psychological terminology is used occasionally, although not always appropriately. Errors of grammar, punctuation and spelling are frequent, intrusive and often obscure meaning.

**0 marks**

**No relevant content**

Total AO1 marks for Question 1 = 7

Total AO2 marks for Question 1 = 10

Total AO3 marks for Question 1 = 3

**Total marks for Question 1 = 20**

2

- (a) A researcher carried out a study to investigate young children's understanding of the physical world. She used 10 infants under the age of 8 months and 10 infants aged between 12 and 15 months. Testing each child separately, the researcher waited until the child was playing with a teddy bear and then removed the teddy bear from the child's grasp and covered it with a cloth in full view of the child. She then recorded whether or not the child reached for the teddy bear.
- (i) Name the cognitive ability that this experiment is designed to test. (1 mark)

**[AO1 = 1]****AO1** Object permanence (concept)

- (a) (ii) Based on your knowledge of Piaget's work, explain the likely outcome of this study. (2 marks)

**[AO1 = 2]**

**AO1** More of the children aged between 12 and 15 months will continue to search for the toy after it has been covered than those under the age of 8 months (1).  
A further mark for either of the following points: Piaget suggested that object permanence is acquired at around the age of 8 months (1). Object permanence is the ability to understand that an object continues to exist even when it is out of sight (1). 1 mark basic muddled explanation; 2 marks clear explanation.

- (a) (iii) Identify the dependent variable in this study. (1 mark)

**[AO3 = 1]****AO3** Whether or not the child continues to search for the teddy.

- (a) (iv) The researcher tested every child herself. Explain why it was important that the same researcher tested every child. (2 marks)

**[AO3 = 2]**

**AO3** Up to two marks for explanation: for reliability (consistency); to control for extraneous variables use of different researchers might affect the outcome of the study description of how using another researcher might affect the result; avoids researcher bias. Accept other valid alternatives. 1 mark basic muddles, 2 marks clear explanation.



- (b) Piaget suggested that a child's understanding of the world would change whenever the child experienced something for the first time. He referred to this process of change as adaptation.

Explain how adaptation might occur when a child who is familiar with chickens sees a duck for the first time. (2 marks)

**[AO2 = 2]**

- AO2** Up to two marks for valid explanation of how the child's present understanding of the world might change. Various answers are acceptable. Possible answer: the child might try to assimilate the duck into a chicken schema (1) chicken schema will not fit so child will develop a new schema (duck) using accommodation (or existing schema will change) (1). Credit answers focusing on just assimilation or just accommodation and answers based on disequilibrium/restoring equilibrium. Clear, well-applied answer 2 marks. Brief or muddled answer - 1 mark.

- (c) Discuss Vygotsky's theory of cognitive development. Refer to **one other** approach to cognitive development in your answer. (12 marks)

**[AO1 = 4, AO2 = 8]**

- AO1** Up to four marks for Vygotsky's approach described. Likely content: emphasis on social factors particularly parental input; internalisation of adult world; importance/role of language; Vygotsky's consideration of ZPD; child as apprentice and importance of peer tutoring; role of the expert; stages of concept formation; scaffolding. Credit description of relevant evidence – 1 mark eg Wood & Middleton's research into scaffolding.
- AO2** Up to eight marks for discussion/analysis. Candidates may focus on a limited number of issues and explore them in detail or consider several points more briefly. Likely issues: implications of Vygotsky's approach for education; cultural specificity; specific applications eg guided participation; comparison with alternative approaches eg Piaget. Credit use of relevant evidence.

**Maximum 8 marks of no other approach presented.**

## Mark Bands

### 12 - 10 marks

#### **Excellent answers**

Vygotsky's theory is thoroughly described, showing sound and accurate knowledge and understanding. Discussion is full and well balanced, with appropriate analysis and application. Any references to research are accurate. Evaluative points and other theory are presented in the context of the discussion as a whole. The answer is well focused, organised and mostly relevant with little, if any, misunderstanding.

The candidate expresses most ideas clearly and fluently, with consistently effective use of psychological terminology. Arguments are well structured, with appropriate use of sentences and paragraphs. There are few, if any, minor errors of grammar, punctuation and spelling. The overall quality of language is such that meaning is rarely, if ever, obscured.

### 9 - 7 marks

#### **Good to average answers**

Answer shows knowledge and understanding of Vygotsky's theory and there is an attempt to present an organised evaluation. Some discussion/analysis/application is evident and the answer is mostly focused on the question, although there may be some irrelevance and/or misunderstanding. At the top of the band another theory is included. Any references to research are relevant but are perhaps not linked so clearly to the discussion as for the top band.

The candidate expresses most ideas clearly and makes some appropriate use of psychological terminology. The answer is organised, using sentences and paragraphs. Errors of grammar, punctuation and spelling may be present but are mostly minor, such that they obscure meaning only occasionally.

### 6 - 4 marks

#### **Average to poor answers**

Answer shows some knowledge and understanding of Vygotsky's theory. Answers in this band are likely to be mostly descriptive and there is likely to be irrelevance and/or inaccuracy. Answers constituting reasonable description with minimal focus on the question are likely to be in this band. For 5/6 marks there must be some discussion/analysis/application.

The candidate expresses basic ideas clearly but there may be some ambiguity. The candidate uses key psychological terminology inappropriately on some occasions. The answer may lack structure, although there is some evidence of use of sentences and paragraphs. There are occasional intrusive errors of grammar, punctuation and spelling which obscure meaning.

**3 – 1 marks**

**Poor answers**

Answer must have some relevant content, perhaps fair description related to the question. There are probably substantial inaccuracies and/or irrelevance. A valid but extremely brief, perhaps unfinished, answer will come into this band.

The candidate shows deficiencies in expression of ideas resulting in frequent confusion and/or ambiguity. Answers lack structure, consisting of a series of unconnected ideas. Psychological terminology is used occasionally, although not always appropriately. Errors of grammar, punctuation and spelling are frequent, intrusive and often obscure meaning.

**0 marks**

**No relevant content**

Total AO1 marks for Question 2 = 7

Total AO2 marks for Question 2 = 10

Total AO3 marks for Question 2 = 3

**Total marks for Question 2 = 20**

3

(a) Emma and Dana are three years old and play together at nursery school. Dana spills black paint all over Emma's painting and Emma gets very cross. The nursery teacher tries to calm her down, "Don't be cross, Emma. Dana didn't mean to spoil your picture".

Identify **two** differences between moral realism and moral relativism. Refer to the text above in your answer. (4 marks)

[AO1 = 2, AO2 = 2]

**AO1** One mark each difference. The most likely answers given the scenario are as follows: amount of damage; intention.  
Other possible differences are less likely given the scenario but can still gain AO1 credit: heteronomous v autonomous; expiatory v reciprocal punishment; rules from on high v rules by common consent.

**AO2** Up to two marks for linking to the text as follows:  
Emma is using moral realism because she is considering amount of damage (1), not Dana's intention (1).  
Also accept answers based on the relativist perspective of the teacher ie does consider intent (1)  
Also accept links to the text based on other differences as long as link is valid.

(b) A psychologist investigating moral development asks a group of children aged four to eight years to paint pictures. The psychologist gives the children some sweets to share as a reward for drawing the pictures. He is interested to see how the children divide up the sweets between them.

(i) Identify the type of moral behaviour that the psychologist is investigating in this study. (1 mark)

[AO1 = 1]

**AO1** One mark for correct term: Distributive justice

- |     |      |  |
|-----|------|--|
| (b) | (ii) | Briefly discuss <b>one</b> ethical issue that the psychologist should consider when carrying out this study. <span style="float: right;"><i>(3 marks)</i></span> |
|-----|------|--|

**[AO3 = 3]**

**AO3** One mark for knowledge of a relevant ethical issue, plus up to two marks for discussion of the issue. Candidates should expand on why/how the issue raises problems and link their discussion to the study described. Most likely issue is consent and need for parental consent but other issues should be credited if at all relevant to this scenario.

- |     |  |
|-----|--|
| (c) | Discuss Eisenberg's model of prosocial reasoning. <span style="float: right;"><i>(12 marks)</i></span> |
|-----|--|

**[AO1 = 4, AO2 = 8]**

**AO1** Up to 4 marks for description of Eisenberg's model of prosocial reasoning. Credit reference to knowledge of the stages and description of reasoning at various stages; hedonistic - help if it benefits oneself; needs-oriented - help if person appears in need; approval - help to gain praise of others; empathic/self-reflective - feeling for others, sense of duty; strongly internalised - own values guide behaviour. Maximum 2 marks if stages are simply named. Credit description of relevant evidence up to 1 mark.

**AO2** Up to 8 marks for discussion and analysis. Likely discussion points: broad similarities between the pattern of development and reasoning seen in Eisenberg's stages and those of Piaget and Kohlberg; detail of these similarities eg approval oriented = to Kohlberg's good-boy, good-girl stage; interpersonal emphasise versus legal justice emphasise; general shift maybe links to lessening egocentrism; focus on altruism/prosocial reasoning, unlike other researchers who focus on wrongdoing; cross-cultural evidence supporting Eisenberg; Eisenberg's method has high predictive validity; use of hypothetical dilemmas - perhaps reasoning here is more sophisticated than in real-life (Damon); subjective analysis in allocation of responses to stages. Credit use of relevant evidence.

## Mark Bands

### 12 - 10 marks

#### **Excellent answers**

Eisenberg's theory is thoroughly described, showing sound and accurate knowledge and understanding. Discussion is full and well balanced, with appropriate analysis and application. Any references to research are accurate. Evaluative comment is not simply stated but is presented in the context of the discussion as a whole. The answer is well focused, organised and mostly relevant with little, if any, misunderstanding.

The candidate expresses most ideas clearly and fluently, with consistently effective use of psychological terminology. Arguments are well structured, with appropriate use of sentences and paragraphs. There are few, if any, minor errors of grammar, punctuation and spelling. The overall quality of language is such that meaning is rarely, if ever, obscured.

### 9 - 7 marks

#### **Good to average answers**

Answer shows knowledge and understanding of Eisenberg's theory and there is an attempt to present an organised evaluation. Some discussion/analysis/application is evident and the answer is mostly focused on the question, although there may be some irrelevance and/or misunderstanding. Any references to research are relevant but are perhaps not linked so clearly to the discussion as for the top band.

The candidate expresses most ideas clearly and makes some appropriate use of psychological terminology. The answer is organised, using sentences and paragraphs. Errors of grammar, punctuation and spelling may be present but are mostly minor, such that they obscure meaning only occasionally.

### 6 – 4 marks

#### **Average to poor answers**

Answer shows some knowledge and understanding of Eisenberg's theory. Answers in this band are likely to be mostly descriptive and there is likely to be irrelevance and/or inaccuracy. Answers constituting reasonable description with minimal focus on the question are likely to be in this band. For 5/6 marks there must be some discussion/analysis/application.

The candidate expresses basic ideas clearly but there may be some ambiguity. The candidate uses key psychological terminology inappropriately on some occasions. The answer may lack structure, although there is some evidence of use of sentences and paragraphs. There are occasional intrusive errors of grammar, punctuation and spelling which obscure meaning.

**3 – 1 marks**

**Poor answers**

Answer must have some relevant content, perhaps fair description related to the question. There are probably substantial inaccuracies and/or irrelevance. A valid but extremely brief, perhaps unfinished, answer will come into this band.

The candidate shows deficiencies in expression of ideas resulting in frequent confusion and/or ambiguity. Answers lack structure, consisting of a series of unconnected ideas. Psychological terminology is used occasionally, although not always appropriately. Errors of grammar, punctuation and spelling are frequent, intrusive and often obscure meaning.

**0 marks**

**No relevant content**

Total AO1 marks for Question 3 = 7

Total AO2 marks for Question 3 = 10

Total AO3 marks for Question 3 = 3

**Total marks for Question 3 = 20**

**SECTION B: APPLIED OPTIONS**

**4**

(a) Briefly discuss the holistic form explanation of face recognition. (4 marks)

**[AO1 = 2, AO2 = 2]**

**AO1** Up to two marks for knowledge of holistic form theory. Credit any relevant aspects eg whole face is important for recognition; configuration of features; top-down approach; FRU/template for each face we know; PIN/personal information match; name generation.

**AO2** Up to two marks for brief evaluation/analysis/comment. Likely points: comparison with feature theory; evidence to support holistic theory; cannot neglect features altogether – some bottom-up information must be necessary for recognition; holistic form/existing knowledge more likely to be influential in poor viewing conditions; relevance of face recognition disorders eg Capgras. Candidate may offer two brief analytical points or expand on one.

(b) One way of improving a person's recall of events is the cognitive interview. Identify **two** features of the cognitive interview and suggest how **each** of these features could be used to help a witness recall the details of a bank robbery which they had seen. (4 marks)

**[AO1 = 2, AO2 = 2]**

**AO1** One mark (up to two) for each feature of the cognitive interview identified: use of context; recall all events however insignificant; recall in different order; recall from another perspective. Credit also reference to features of the enhanced cognitive interview eg minimise distractions.

**AO2** One mark for linking each feature identified to the bank robbery scenario. Possible answer: Interviewer might ask witness to say what they think the bank cashier might have seen from where he was standing (recall from another perspective). The link must relate to the feature identified for AO1.



(c) James witnessed a serious car accident as he walked to work. He told his friends at work he had seen the accident and they asked him all about it. When James got home from work, he read a report of the accident in the evening paper. The next day, the police called to interview James about the accident. They showed him a diagram to remind him about the layout of the road.

Discuss **at least two** factors affecting the reliability of eye-witness accounts.  
Refer to James in your answer. *(12 marks)*

**[AO1 = 4, AO2 = 8]**

**AO1** Up to 4 marks for outline/description of at least two factors affecting the reliability of eye-witness accounts. Likely content: leading questions (post-event contamination); emotion; context; age of witness. Credit other relevant factors. Although weapon focus is unlikely, it can still receive AO1 credit. Candidates may have a maximum of one mark for naming/listing at least two factors. Up to one mark for description of relevant evidence.

**AO2** Up to 8 marks for discussion/analysis/application. Marks to be awarded for: use of evidence ie explanation of how evidence supports the role of the factor identified; evaluation of the evidence cited; comparison of the relative importance of different factors. Up to three marks for application as follows: accident was serious (emotion); discussion with friends (post-event contamination); reading newspaper report (post-event contamination); police questions (possibly leading); diagram (context). Credit use of relevant evidence.

**Maximum 7 marks if only one factor presented.**

## Mark Bands

### 12 - 10 marks

#### **Excellent answers**

At least two factors are thoroughly described, showing sound and accurate knowledge and understanding. Discussion is full and well balanced, with appropriate analysis and application. Any references to research are accurate. There is clear application to the stem. Evaluative comment is not simply stated but is presented in the context of the discussion as a whole. The answer is well focused, organised and mostly relevant with little, if any, misunderstanding.

The candidate expresses most ideas clearly and fluently, with consistently effective use of psychological terminology. Arguments are well structured, with appropriate use of sentences and paragraphs. There are few, if any, minor errors of grammar, punctuation and spelling. The overall quality of language is such that meaning is rarely, if ever, obscured.

### 9 - 7 marks

#### **Good to average answers**

Answer shows knowledge and understanding of relevant factor/s and there is an attempt to present an organised evaluation.

Some discussion/analysis/application is evident and the answer is mostly focused on the question, although there may be some irrelevance and/or misunderstanding. Any references to research are relevant but are perhaps not linked so clearly to the discussion as for the top band.

The candidate expresses most ideas clearly and makes some appropriate use of psychological terminology. The answer is organised, using sentences and paragraphs. Errors of grammar, punctuation and spelling may be present but are mostly minor, such that they obscure meaning only occasionally.

### 6 – 4 marks

#### **Average to poor answers**

Answer shows some knowledge and understanding of relevant factors. Answers in this band are likely to be mostly descriptive and there is likely to be irrelevance and/or inaccuracy. Answers constituting reasonable description with minimal focus on the question are likely to be in this band. For 5/6 marks there must be some discussion/analysis/application.

The candidate expresses basic ideas clearly but there may be some ambiguity. The candidate uses key psychological terminology inappropriately on some occasions. The answer may lack structure, although there is some evidence of use of sentences and paragraphs. There are occasional intrusive errors of grammar, punctuation and spelling which obscure meaning.

**3 – 1 marks**

**Poor answers**

Answer must have some relevant content, perhaps fair description related to the question. There are probably substantial inaccuracies and/or irrelevance. A valid but extremely brief, perhaps unfinished, answer will come into this band.

The candidate shows deficiencies in expression of ideas resulting in frequent confusion and/or ambiguity. Answers lack structure, consisting of a series of unconnected ideas. Psychological terminology is used occasionally, although not always appropriately. Errors of grammar, punctuation and spelling are frequent, intrusive and often obscure meaning.

**0 marks**

**No relevant content**

Total AO1 marks for Question 4 = 8

Total AO2 marks for Question 4 = 12

**Total marks for Question 4 = 20**

5

|  |
|--|
| (a) Briefly discuss how cognitive psychologists have explained mood disorders.<br><p style="text-align: right;"><i>(4 marks)</i></p> |
|--|

**[AO1 = 2, AO2 = 2]**

**AO1** Up to two marks for cognitive explanations for mood disorders. Possible content: negative cognitive set; cognitive triad (negative thoughts about self, world, future; biased attribution – negative events are seen as due to internal, stable global causes; magnification of significance of events; overgeneralization; absolutist thinking; selective perception of negative events; Ellis’s activating events theory; irrational beliefs etc.

**AO2** Up to two marks for brief discussion/comment. Possible issues: evidence to support; evidence to contradict eg biological evidence; cannot easily explain manic phase of bipolar; cognitive approach has led to the development of successful therapy. May gain full credit for two very brief points or for one expanded.

|  |
|--|
| (b) Identify <b>two</b> sub-types of schizophrenia. Explain <b>one</b> problem associated with the diagnosis of schizophrenia.<br><p style="text-align: right;"><i>(4 marks)</i></p> |
|--|

**[AO1 = 2, AO2 = 2]**

**AO1** One mark for each sub-type identified (up to two marks): catatonic; disorganised (hebephrenic); paranoid; undifferentiated; residual; Type 1; Type 2.

**AO2** Up to two marks for brief discussion of one problem of diagnosis. Possible issues: symptoms often overlap between sub-types; overlap with different disorders eg manic depression and schizoaffective disorder; lack of reliability between clinicians; reference to Rosenhan; interpersonal factors eg ethnic bias. One mark for very brief point, two marks for clear discussion. Note that some points overlap and should be marked as one problem where possible.

(c) Discuss the use of anti-psychotic drugs to treat schizophrenia. (12 marks)

**[AO1 = 4, AO2 = 8]**

**AO1** Up to 4 marks for knowledge of the use of anti-psychotic drugs in the treatment of schizophrenia. Credit the following: description of specific medication (eg conventional anti-psychotics - haloperidol, newer anti-psychotics - risperidone); mode of action (eg blocking of dopamine activity, affecting levels of serotonin); description of the process of chemical transmission; description of relevant evidence. Credit evidence up to 2 marks.

**AO2** Up to 8 marks for discussion. Likely discussion points: effectiveness (both positive and negative symptoms); side-effects, especially long-term effects (motor disturbances); possible dependency; does not address social factors; improvement in day to day functioning for sufferer; improvements for family/society; revolving door effect; need for close supervision; comparison of traditional and newer generation anti-psychotics; comparison with other treatments eg psychotherapy; issues for health professionals; history of the use (or overuse) of anti-psychotics when first introduced. Credit use of relevant evidence.

### Mark Bands

**12 - 10 marks**

#### **Excellent answers**

The use of anti-psychotic drugs is thoroughly described, showing sound and accurate knowledge and understanding. Discussion is full and well balanced, with appropriate analysis and application. Any references to research are accurate. Evaluative comment is not simply stated but is presented in the context of the discussion as a whole. The answer is well focused, organised and mostly relevant with little, if any, misunderstanding.

The candidate expresses most ideas clearly and fluently, with consistently effective use of psychological terminology. Arguments are well structured, with appropriate use of sentences and paragraphs. There are few, if any, minor errors of grammar, punctuation and spelling. The overall quality of language is such that meaning is rarely, if ever, obscured.

**9 - 7 marks**

**Good to average answers**

Answer shows knowledge and understanding of the use of anti-psychotic drugs and there is an attempt to present an organised evaluation. Some discussion/analysis is evident and the answer is mostly focused on the question, although there may be some irrelevance and/or misunderstanding. Any references to research are relevant but are perhaps not linked so clearly to the discussion as for the top band.

The candidate expresses most ideas clearly and makes some appropriate use of psychological terminology. The answer is organised, using sentences and paragraphs. Errors of grammar, punctuation and spelling may be present but are mostly minor, such that they obscure meaning only occasionally.

**6 – 4 marks**

**Average to poor answers**

Answer shows some knowledge and understanding of the use of anti-psychotic drugs. Answers in this band are likely to be mostly descriptive and there is likely to be irrelevance and/or inaccuracy. Answers constituting reasonable description with minimal focus on the question are likely to be in this band. For 5/6 marks there must be some discussion/analysis.

The candidate expresses basic ideas clearly but there may be some ambiguity. The candidate uses key psychological terminology inappropriately on some occasions. The answer may lack structure, although there is some evidence of use of sentences and paragraphs. There are occasional intrusive errors of grammar, punctuation and spelling which obscure meaning.

**3 – 1 marks**

**Poor answers**

Answer must have some relevant content, perhaps fair description related to the question. There are probably substantial inaccuracies and/or irrelevance. A valid but extremely brief, perhaps unfinished, answer will come into this band.

The candidate shows deficiencies in expression of ideas resulting in frequent confusion and/or ambiguity. Answers lack structure, consisting of a series of unconnected ideas. Psychological terminology is used occasionally, although not always appropriately. Errors of grammar, punctuation and spelling are frequent, intrusive and often obscure meaning.

**0 marks**

**No relevant content**

Total AO1 marks for Question 5 = 8

Total AO2 marks for Question 5 = 12

**Total marks for Question 5 = 20**

6

|     |     |   |           |
|-----|-----|---|-----------|
| (a) | (i) | Outline <b>one</b> way of measuring stress. | (2 marks) |
|-----|-----|---|-----------|

[AO1 = 2]

**AO1** Up to two marks for an outline of a way of measuring stress. Allow one mark for identifying a relevant way, plus one mark for expanded description. Relevant answers include: physiological measures eg blood or urine to measure hormone levels; polygraph to measure arousal; self-report measures eg Kanner's Hassles and Uplifts scale and Homes and Rahe's life events scale; behavioural observation measures eg speech hesitations etc. Credit other relevant answers.

|     |      |   |           |
|-----|------|---|-----------|
| (a) | (ii) | Explain <b>one</b> limitation of the way of measuring stress that you have outlined in your answer to (a)(i). | (2 marks) |
|-----|------|---|-----------|

[AO2 = 2]

**AO2** Up to two marks for a valid limitation of the way identified in part (a)(i). Allow one mark for briefly identifying the limitation, plus one mark for elaboration. Possible issues: physiological measures do not indicate type of emotion – could be positive arousal; self-report measures are subjective; specific criticisms of named questionnaires; ethical issues.

Note that if the answer to (a)(i) and (a)(ii) do not correspond then credit whichever benefits the candidate the most.

- (b) Identify **two** personal variables that mediate the way in which people respond to stress. Explain how **one** of these variables might affect the way in which a person copes with the stress of being bullied at work. (4 marks)

[AO1 = 2, AO2 = 2]

**AO1** One mark each for identification to two relevant personal variables. Most likely answers: hardiness; internal locus of control; personality type (A, B or C)

**AO2** Up to two marks for linking the one of the identified personal variables to the stem ie coping with the stress of being bullied at work.  
Hardiness: hardy person feels in control, will see the bullying as a challenge and will be able to change the situation. Will not suffer from stress in this situation.  
Internal locus of control – person will feel they can control situation and therefore not feel threatened, will not be stressed by it.  
Type A – will become stressed, is competitive/aggressive and will probably attack the bully or rage at the boss. May develop high blood pressure.  
Type B – will not feel stressed or anxious. Will continue to deal with colleague calmly and will not become ill.  
Type C – outwardly calm at work but will bottle it up. May become seriously ill after a time.

- (c) Discuss the cognitive approach to managing stress. Refer to **one other** approach in your answer. (12 marks)

[AO1 = 4, AO2 = 8]

**AO1** Up to four marks for knowledge and understanding of the cognitive approach to stress management. Candidates may focus on a specific cognitive therapy or generic cognitive techniques. Likely content: REBT but credit other relevant methods eg Beck's CBT, stress inoculation training and self-instructional training. Marks should be awarded for reference to elements of the given therapy eg identification of negative beliefs, rational confrontation challenging negative beliefs; replacing negative beliefs with more positive thoughts; homework tasks; keeping a diary of events; patient as scientist designing experiments - hypothesis testing. Credit description of relevant evidence – 1 mark.



**AO2** Up to eight marks for discussion and analysis. Likely points: clear structure and goal; addressing underlying thinking treats cause, time consuming, varies between therapists; requires active participation of the patient; REBT too direct and confrontational for some people; long-term effectiveness. Credit comparison with other approach. Most likely alternatives are biofeedback and systematic desensitization but others are acceptable eg biomedical therapy (drugs), hypnosis etc. Analytical marks may also be gained through broader analysis of the advantages and limitations of different types of strategy ie problem-focused versus emotion-focused. Credit use of relevant evidence.

**Maximum 8 marks if no alternative approach presented**

**Mark Bands**

**12 - 10 marks**

**Excellent answers**

The cognitive approach to managing stress is thoroughly described, showing sound and accurate knowledge and understanding. There is clear and relevant reference to another approach. Discussion is full and well balanced, with appropriate analysis and application. Any references to research are accurate. Evaluative comment is not simply stated but is presented in the context of the discussion as a whole. The answer is well focused, organised and mostly relevant with little, if any, misunderstanding.

The candidate expresses most ideas clearly and fluently, with consistently effective use of psychological terminology. Arguments are well structured, with appropriate use of sentences and paragraphs. There are few, if any, minor errors of grammar, punctuation and spelling. The overall quality of language is such that meaning is rarely, if ever, obscured.

**9 - 7 marks**

**Good to average answers**

Answer shows knowledge and understanding of the cognitive approach to managing stress and there is an attempt to present an organised evaluation. Some discussion/analysis/application is evident and the answer is mostly focused on the question, although there may be some irrelevance and/or misunderstanding. Any references to research are relevant but are perhaps not linked so clearly to the discussion as for the top band. Must be some reference to another approach for 9 marks.

The candidate expresses most ideas clearly and makes some appropriate use of psychological terminology. The answer is organised, using sentences and paragraphs. Errors of grammar, punctuation and spelling may be present but are mostly minor, such that they obscure meaning only occasionally.

**6 – 4 marks**

**Average to poor answers**

Answer shows some knowledge and understanding of the cognitive approach to managing stress. Answers in this band are likely to be mostly descriptive and there is likely to be irrelevance and/or inaccuracy. Answers constituting reasonable description with minimal focus on the question are likely to be in this band. For 5/6 marks there must be some discussion/analysis/application.

The candidate expresses basic ideas clearly but there may be some ambiguity. The candidate uses key psychological terminology inappropriately on some occasions. The answer may lack structure, although there is some evidence of use of sentences and paragraphs. There are occasional intrusive errors of grammar, punctuation and spelling which obscure meaning.

**3 – 1 marks**

**Poor answers**

Answer must have some relevant content, perhaps fair description related to the question. There are probably substantial inaccuracies and/or irrelevance. A valid but extremely brief, perhaps unfinished, answer will come into this band.

The candidate shows deficiencies in expression of ideas resulting in frequent confusion and/or ambiguity. Answers lack structure, consisting of a series of unconnected ideas. Psychological terminology is used occasionally, although not always appropriately. Errors of grammar, punctuation and spelling are frequent, intrusive and often obscure meaning.

**0 marks**

**No relevant content**

Total AO1 marks for Question 6 = 8

Total AO2 marks for Question 6 = 12

**Total marks for Question 6 = 20**

7

(a) A youth worker specialising in the prevention of substance abuse is going to run a series of sessions at a secondary school. The aim of the sessions is to help prevent substance abuse amongst 15-year-olds.

Using your knowledge of psychology, identify **two** prevention techniques. Briefly explain how the youth worker might use **each** of the techniques at the secondary school. (4 marks)

**[AO1 = 2, AO2 = 2]**

**AO1** One mark for each technique identified. Likely answers: social inoculation; fear-arousing appeals. Credit also identification of risk groups and health promotion/education.

**AO2** One mark for each outline of how the named techniques might be applied in the secondary school setting with 15-year-olds. Possible examples:  
Social inoculation - pupils could role-play approach from drug dealer with person saying 'No'.  
Fear-arousal – pupils could watch videos showing horrific consequences of drug abuse followed by discussion.

(b) Use the example of a person who has an alcohol abuse problem to explain what is involved in each of the following;

(i) psychological dependence; (2 marks)

**[AO1 = 1, AO2 = 1]**

**AO1** One mark for knowledge of term: emotional and cognitive compulsion to use a substance (or similar)

**AO2** One mark for application - explaining how psychological dependence might be demonstrated in the behaviour of someone dependent on alcohol. Possible answers: daily activities are focused on alcohol; wanting to have alcohol always in the house; craving for alcohol; looking forward to alcohol as soon as you come home from work etc.

(b) (ii) physical dependence. (2 marks)

**[AO1 = 1, AO2 =1]**

**AO1** One mark for knowledge of term: body has got used to the substance and needs it to maintain the body in what is now its 'normal state'.

**AO2** One mark for application - explaining how physical dependence might be demonstrated in the behaviour of someone dependent on alcohol. Possible answer: symptoms of withdrawal if alcohol intake ceases - shaking/sweating/stomach cramps/DTs etc. Tolerance – needs more alcohol for same effect.

(c) Discuss **two** explanations for substance abuse. Refer to evidence in your answer. (12 marks)

**[AO1 = 4, AO2 = 8]**

**AO1** Up to 4 marks for knowledge and description of two explanations for substance abuse, usually two marks for each. Candidates may focus on one substance eg alcohol, or may refer to abusing behaviour in general.

Biological explanations: genetics and hereditary factors; twin studies and adoption studies; selective breeding experiments with animals; gene mapping studies; role of neurotransmitters (D2 receptor gene and alcohol dependency); biochemical factors in tolerance and withdrawal; role of the brain's reward centre - ventral tegmental area in the midbrain to the nucleus accumbens and frontal cortex.

Behavioural explanations: operant conditioning - reinforcement via tension reduction; classical conditioning - stimuli associated with drug taking elicit same pleasure.

Sociocultural explanations: links with socioeconomic factors and unemployment; drug tolerant environments; social acceptability.

Psychodynamic explanation: over-dependency traceable to early experience  
Credit also personality factors: dependent, antisocial, impulsive, novelty-seeking, depressive. Credit description of relevant evidence – 1 mark.

**AO2** Up to 8 marks for discussion of the explanations, usually 4 marks for each. Relevant material will vary according to the explanations given. Possible points include: determinism versus free will; the issue of nature v nurture; establishing cause and effect; reductionism; implications eg for abusers, family, society; evidence to support assertions; comparison of explanations; outlook in relation to treatment. Credit use of relevant evidence and evaluation of methodology.

**Maximum 8 marks if no evidence presented**

**Maximum 7 marks if only one explanation presented**

## Mark Bands

### 12 - 10 marks

#### **Excellent answers**

Two explanations for substance abuse are thoroughly described, showing sound and accurate knowledge and understanding. Evaluation is full and well balanced, with appropriate analysis and application. There are references to evidence. Evaluative comment is not simply stated but is presented in the context of the discussion as a whole. The answer is well focused, organised and mostly relevant with little, if any, misunderstanding.

The candidate expresses most ideas clearly and fluently, with consistently effective use of psychological terminology. Arguments are well structured, with appropriate use of sentences and paragraphs. There are few, if any, minor errors of grammar, punctuation and spelling. The overall quality of language is such that meaning is rarely, if ever, obscured.

### 9 - 7 marks

#### **Good to average answers**

Answer shows knowledge and understanding of two (or exceptionally one) explanations for substance abuse and there is an attempt to present an organised evaluation. Evaluation is evident and the answer is mostly focused on the question, although there may be some irrelevance and/or misunderstanding. Any references to research are relevant but are perhaps not linked so clearly to the discussion as for the top band.

The candidate expresses most ideas clearly and makes some appropriate use of psychological terminology. The answer is organised, using sentences and paragraphs. Errors of grammar, punctuation and spelling may be present but are mostly minor, such that they obscure meaning only occasionally.

### 6 – 4 marks

#### **Average to poor answers**

Answer shows some knowledge and understanding of explanation/s for substance abuse. Answers in this band are likely to be mostly descriptive and there is likely to be irrelevance and/or inaccuracy. Answers constituting reasonable description with minimal focus on the question are likely to be in this band. For 5/6 marks there must be some evaluation.

The candidate expresses basic ideas clearly but there may be some ambiguity. The candidate uses key psychological terminology inappropriately on some occasions. The answer may lack structure, although there is some evidence of use of sentences and paragraphs. There are occasional intrusive errors of grammar, punctuation and spelling which obscure meaning.

**3 – 1 marks**

**Poor answers**

Answer must have some relevant content, perhaps fair description related to the question. There are probably substantial inaccuracies and/or irrelevance. A valid but extremely brief, perhaps unfinished, answer will come into this band.

The candidate shows deficiencies in expression of ideas resulting in frequent confusion and/or ambiguity. Answers lack structure, consisting of a series of unconnected ideas. Psychological terminology is used occasionally, although not always appropriately. Errors of grammar, punctuation and spelling are frequent, intrusive and often obscure meaning.

**0 marks**

**No relevant content**

Total AO1 marks for Question 7 = 8

Total AO2 marks for Question 7 = 12

**Total marks for Question 7 = 20**

8

- |     |     |   |           |
|-----|-----|---|-----------|
| (a) | (i) | Briefly outline the process of anger management when used as a therapy for offending. | (2 marks) |
|-----|-----|---|-----------|

**[AO1 = 2]**

**AO1** One mark for each key component of the process: award 1 mark for each element named or described: changing the way the offender thinks/understands/recognises their anger; changing the way the offender responds to previously anger-provoking situations. Accept Novaco's three stages – cognitive preparation, skills acquisition, application practice named or described.

- |     |      |  |           |
|-----|------|--|-----------|
| (a) | (ii) | Suggest <b>two</b> limitations of anger management as a therapy for offending. | (2 marks) |
|-----|------|--|-----------|

**[AO2 = 2]**

**AO2** One mark for each limitation. Likely answers: assumes (perhaps mistakenly) that anger is the cause of offending; skills learned in prison may not easily generalise to the outside world.

- |     |   |           |
|-----|---|-----------|
| (b) | Identify <b>two</b> aspects of the 'criminal personality' as defined by Eysenck. Explain how <b>each</b> might lead a person to be involved in offending. | (4 marks) |
|-----|---|-----------|

**[AO1 = 2, AO2 = 2]**

**AO1** One mark for each aspect identified (up to two). Possible answers: neuroticism; extraversion; psychoticism.

**AO2** One mark for brief explanation of how each of the named aspects might lead to offending:  
 Neuroticism – person may be unpredictable/unstable  
 Extraversion – person may seek excitement/stimulation because nervous system is under-aroused/ may not condition easily and not learn from mistakes  
 Psychoticism – person will be unfeeling, capable of cruelty

|  |                   |
|--|-------------------|
| (c) Describe and evaluate <b>two</b> alternatives to custodial sentencing. | <i>(12 marks)</i> |
|--|-------------------|

**[AO1 = 4, AO2 = 8]**

- AO1** Up to two marks for knowledge/description of two alternatives (usually two marks for each). Likely answers:  
 Restorative justice – making amends either emotionally or materially; face-to-face meetings, practical reparation.  
 Tagging – electronic devices as a means of enforcing curfew, reduced opportunities for offending.  
 Probation – supervision within the community; regular reporting; attendance at group sessions; diversionary activities etc.  
 Up to 1 mark for relevant evidence eg Sherman and Strang (2007) restorative justice; Cassidy et al. (2005) tagging. Accept other valid alternatives eg fines, community service etc.
- AO2** Up to 8 marks for evaluation and analysis. Likely content: discussion of each alternative in relation to the aims of punishment (deterrence, incapacitation, reform, retribution) ie how effectively each meets the aims. Credit should also be given for comparison, either of the two alternatives or with custodial sentencing. Other relevant issues: cost; availability; resource issues eg trained mediators for sensitive handling of restorative justice programmes; effect on victim; effect on offender and offender’s family; the ability to maintain family relationships/ remain in employment; the relative stigma attached to each punishment; attitudes of society; political considerations. Credit use of relevant evidence.

**Maximum 7 marks if only one alternative presented**

**Mark Bands**

- 12 - 10 marks**     **Excellent answers**  
 Two alternatives are thoroughly described, showing sound and accurate knowledge and understanding. Evaluation is full and well balanced, with appropriate analysis and application. Any references to research are accurate. Evaluative comment is not simply stated but is presented in the context of the discussion as a whole. The answer is well focused, organised and mostly relevant with little, if any, misunderstanding.
- The candidate expresses most ideas clearly and fluently, with consistently effective use of psychological terminology. Arguments are well structured, with appropriate use of sentences and paragraphs. There are few, if any, minor errors of grammar, punctuation and spelling. The overall quality of language is such that meaning is rarely, if ever, obscured.



**9 - 7 marks**

**Good to average answers**

Answer shows knowledge and understanding of relevant alternative/s and there is an attempt to present an organised evaluation. Some evaluation is evident and the answer is mostly focused on the question, although there may be some irrelevance and/or misunderstanding. Any references to research are relevant but are perhaps not linked so clearly to the discussion as for the top band.

The candidate expresses most ideas clearly and makes some appropriate use of psychological terminology. The answer is organised, using sentences and paragraphs. Errors of grammar, punctuation and spelling may be present but are mostly minor, such that they obscure meaning only occasionally.

**6 – 4 marks**

**Average to poor answers**

Answer shows some knowledge and understanding of relevant alternative/s. Answers in this band are likely to be mostly descriptive and there is likely to be irrelevance and/or inaccuracy. Answers constituting reasonable description with minimal focus on the question are likely to be in this band. For 5/6 marks there must be some discussion/analysis/application.

The candidate expresses basic ideas clearly but there may be some ambiguity. The candidate uses key psychological terminology inappropriately on some occasions. The answer may lack structure, although there is some evidence of use of sentences and paragraphs. There are occasional intrusive errors of grammar, punctuation and spelling which obscure meaning.

**3 – 1 marks**

**Poor answers**

Answer must have some relevant content, perhaps fair description related to the question. There are probably substantial inaccuracies and/or irrelevance. A valid but extremely brief, perhaps unfinished, answer will come into this band.

The candidate shows deficiencies in expression of ideas resulting in frequent confusion and/or ambiguity. Answers lack structure, consisting of a series of unconnected ideas. Psychological terminology is used occasionally, although not always appropriately. Errors of grammar, punctuation and spelling are frequent, intrusive and often obscure meaning.

**0 marks**

**No relevant content**

Total AO1 marks for Question 8 = 8

Total AO2 marks for Question 8 = 12

**Total marks for Question 8 = 20**

**PSYB3 January 10  
Mark Grid**

| Question                                    | AO1              | AO2              | AO3    |
|---|------------------|------------------|--------|
| 1ai)<br>aia)<br>b)<br>c)                    | 3<br><br>4       | <br>2<br>8       | 3      |
| 2 ai)<br>aia)<br>aiaa)<br>aiaa)<br>b)<br>c) | 1<br>2<br><br>4  | <br><br>2<br>8   | 1<br>2 |
| 3a)<br>b)<br>bia)<br>c)                     | 2<br>1<br><br>4  | 2<br><br>8       | 3      |
| 4a)<br>b)<br>c)                             | 2<br>2<br>4      | 2<br>2<br>8      |        |
| 5a)<br>b)<br>c)                             | 2<br>2<br>4      | 2<br>2<br>8      |        |
| 6ai)<br>aia)<br>b)<br>c)                    | 2<br><br>2<br>4  | <br>2<br>2<br>8  |        |
| 7a)<br>b)<br>bia)<br>c)                     | 2<br>1<br>1<br>4 | 2<br>1<br>1<br>8 |        |
| 8ai)<br>aia)<br>b)<br>c)                    | 2<br><br>2<br>4  | <br>2<br>2<br>8  |        |

**Overall Paper Totals**

One question in Section A (Qs 1 – 3) plus two questions in Section B (Qs 4 – 8)

**Total AO1 = 23**

**Total AO2 = 34**

**Total AO3 = 3**