AQA

ASSESSMENT and QUALIFICATIONS ALLIANCE

General Certificate of Education

Psychology 5181/6181
Specification A

PYA1 Cognitive and Developmental Psychology

Mark Scheme

2006 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.

UNIT 1 (PYA1)

COGNITIVE AND DEVELOPMENTAL PSYCHOLOGY

QUALITY OF WRITTEN COMMUNICATION (QoWC)

2 marks	The work is characterised by **clear** expression of ideas, a **good** range of specialist terms and **only few errors** in grammar, punctuation and spelling that detract from the clarity of the material.
1 mark	The work is characterised by **reasonable** expression of ideas, the use of **some** specialist terms and **errors** of grammar, punctuation and spelling that detract from the clarity of the material.
0 marks	The work is characterised by **poor** expression of ideas, **limited** use of specialist terms, **errors and poor** grammar, punctuation and spelling and legibility which obscure the clarity of the material.

ASSESSMENT OBJECTIVES ONE AND TWO

AO1	Assessment objective one = knowledge and **understanding** of psychological theories, terminology, concepts, studies and methods and communication of knowledge and understanding of psychology in a clear and effective manner.
AO2	Assessment objective two = analysis and **evaluation** of psychological theories, concepts, studies and methods and communication of knowledge and understanding of psychology in a clear and effective manner.

2

1 (a) Describe **two** differences between short-term memory (STM) and long-term memory (LTM).

(*3 marks + 3 marks*)

Marking criteria		Performance Descriptions (for each difference)
The majority of candidates are likely to focus their answer on differences to do with encoding, capacity and duration, but other differences (eg forgetting, fragility of storage) may also be creditworthy. **DURATION:** - STM – no more than about 18-20 seconds: LTM very long duration (weeks, months, years). The duration of STM (without rehearsal) is normally accepted to be about 18-20 seconds (Peterson and Peterson 1959); however, long-term memories may have very long durations. Bahrick et al (1975) found evidence for the existence of very long term memories of old school colleagues up to 57 years later (recognition memory was better than recall). Waganaar and Groeneweg (1990) found that memories of concentration camp prisoners, tested thirty years later were good for some details (eg the name of the camp commandant) but other details were forgotten. **CAPACITY:** - STM limited to 7 plus or minus 2 items: LTM limitless or no known limits. The capacity of STM was shown by Jacobs and by Miller to be approximately 7 +/- 2 items/chunks, depending on the type of stimuli used, size of chunk, word length effect, mode of presentation, and the age of the participants. If pronunciation time is used as a measure of STM capacity, Schweikert and Boruff (1986) found that STM span is about 1.5 seconds. The capacity of LTM is said to be limitless, or to have no known limits. Measuring the number of synapses in the brain (eg Merkle 1988) suggests that brain capacity exceeds one thousand gigabytes. Clearly factors such as organisation also affect LTM capacity. **ENCODING:** - STM normally said to be mainly acoustic, LTM mainly semantic. Baddeley's work (1966) shows that words in STM tend to be remembered acoustically and words in LTM semantically. Hintzmann describes encoding in STM as 'articulatory' – in the form of speech. Some studies have provided evidence for visual encoding in STM (eg Brandimonte et al 1992), whereas LTM may be semantic (eg Baddeley 1966), acoustic (especially for music), visual or even olfactory or tactile. Candidates may also offer the fact that the primacy effect is a function of LTM and the recency effect in STM; they may may also describe different forgetting mechanisms in STM and LTM. These may attract credit as long as a difference is identified.	**3**	**Accurate and reasonably detailed** The candidate provides an accurate and reasonably detailed description of a difference between STM and LTM that demonstrates relevant knowledge and understanding. For example, the candidate has clearly described a difference such as different durations and has described the durations of STM as being up to 30 seconds in duration and LTM as being potentially life long in reasonable detail. The difference does not have to be separately/explicitly identified to attract the full 3 marks as long as the description makes the difference clear.
	2	**Less detailed but generally accurate** The candidate provides a less detailed but generally accurate description of one difference between STM and LTM that demonstrates relevant knowledge and understanding. For example, a difference such as different forms of encoding is identified, but is described in less detail; detail may be given for only one store for example, or details may be given for STM and LTM but only in a limited fashion.
	1	**Basic** The candidate provides a basic description of a difference between STM and LTM that demonstrates some relevant knowledge but lacks detail and may be muddled. For example, a difference is identified, but not described. The candidate may simply say 'Duration in STM and LTM is different', without describing the difference, or any details given may be muddled.
	0	**Flawed or inappropriate** The candidate provides a description which is very flawed or an inappropriate description that fails to demonstrate any knowledge or understanding of the topic.

1 (b)   Describe the procedures and findings of **one** study of reconstructive memory.   *(6 marks)*

Marking Criteria		Performance Descriptions
'Reconstructive memory' is the term used to mean that retrieval involves a process of reconstruction, where all the available information about the event is used to reconstruct the details of the event, on the basis of what 'must' have been true. It is important to note that the research must be into reconstructive memory and that therefore not all eyewitness testimony (EWT) research will be acceptable.	**6**	**Accurate and reasonably detailed** The candidate provides an accurate and reasonably detailed description of the procedures and findings of **one** study into reconstructive memory that demonstrates relevant knowledge and understanding. For example, the procedures of Bartlett's (1932) study and findings (eg omissions, shortening of story) are accurate and reasonably detailed.
Acceptable research includes that of Bartlett (1932) and the reproduction technique used with the 'War of the Ghosts' story. Alternatively, the work of Sulin and Dooling (1974) may be offered; they presented their participants either with a story about the dictator "Gerald Martin" or Adolf Hitler; those who read the Hitler version were more likely than the other participants to believe that they had read a sentence about the dictator hating and persecuting Jews. The 'stereotyping' study by Allport and Postman (1947) may also be creditworthy as a study of reconstructive memory. Wynn and Logie (1998) tested memory in a more real-life situation – students' recall of events in their first week at university at intervals ranging from two weeks to six months. Initial accuracy was sustained throughout the period with not much change over time, suggesting limited use of reconstructive memory.	**5-4**	**Less detailed but generally accurate** The candidate provides a less detailed but generally accurate description of the procedures and findings of **one** study into reconstructive memory that demonstrates relevant knowledge and understanding. For example, the candidate gives a less detailed but generally accurate account of the procedures and findings of a study, such as that of Bartlett. If only procedures or only findings are described, this is accurate and reasonably detailed. (Maximum 4 marks)
Other studies which refer to leading questions or post event information may also be allowable as long as the reconstructive nature of the research is made clear.	**3-2**	**Basic** The candidate provides a basic description of the procedures and findings of **one** study of reconstructive memory that demonstrates some relevant knowledge and understanding but lacks detail and may be muddled. For example, a confused account of procedures and findings is offered.
Breadth/depth may be an issue in answers to this question. Answers that describe procedures in detail but findings in less detail are as acceptable as those which are more balanced. If candidates offer only procedures or only findings, then this constitutes partial performance and a maximum of four marks is allowable, as shown in the performance descriptions.		If only procedures or only findings are described, this is less detailed but generally accurate.
	1-0	**Very brief/flawed or inappropriate** The candidate provides a description which is very brief/flawed or an inappropriate description that fails to demonstrate any knowledge or understanding of the topic.

1 (c) 'Sometimes emotional factors help us to remember and other times they make it more difficult.'

Discuss research into the role of emotional factors in memory.

(18 marks)

Marking Criteria	
AO1 criteria are satisfied by a description of research evidence which relates to the role of emotional factors (positive and/or negative) in memory. Empirical research is likely to be offered, as may equally, more theoretical work may be creditworthy.	Freud's theory of repression may be offered, as may empirical research into repression such as that of Williams (1994) or Bradley and Baddeley (1990). Candidates may comment that the existence of posttraumatic stress disorder may in fact be evidence against repression being used to protect the ego from anxiety.
AO2 criteria are likely to be satisfied by an evaluation of the research studies, models and/or theories.	An example of more theoretical work which may be creditworthy is work on explicit or implicit memory bias. In explicit memory bias, negative or threatening information is retrieved relatively better than positive or neutral information in tests based on conscious recollection; in implicit memory bias, negative information is retrieved relatively better than neutral information in a test where conscious recollection is not involved.
There is a considerable amount of research which suggests that emotional factors have either a negative or a positive effect on memory. Research into repression, flashbulb memories, mood (such as mood-state-dependent memory, mode congruity and research into depression and memory) is acceptable. Alternatively, research into false memory syndrome may be used. Eyewitness testimony research is acceptable as long as the link to emotion is made explicitly to emotional factors in memory; for example, research on weapon focus may be appropriate in this context.	Alternatively, work on attentional bias may be relevant, as long as the link to memory (perhaps by mentioning the role of attention in the multi-store model) is made relevant.
For example, flashbulb memories (FBMs) are detailed recollections of the context in which people first heard about an important event. One of the key ingredients of flashbulb memories tends to be high levels of emotional arousal. However, it is notable that FBMs may contain significant inaccuracies. Work on personal flashbulb memories may be cited (eg Sheingold and Tenney, 1982) as long as the emotional factors are emphasised, but anecdotal accounts of candidates' personal experiences are not psychological research and therefore are unlikely to attract credit.	Although, many candidates will refer to research which suggests that memory is worsened as well as enhanced by emotional factors, it is not necessary to mention both effects to attract a mark in the highest bands.
	Commentary may include evaluation of the methodology and of the reliability and validity of the research, as well as the ethics and ethical problems inherent in conducting research in this area.
	Answers which refer only to theory or models are as acceptable, and potentially could attract as much credit as answers which focus on more empirical research.

1 (c)

	Performance Descriptions		**Performance Descriptions**
	AO1: Description of research evidence.		**AO2:** Evaluation/assessment of research.
6	**Accurate and reasonably detailed** The candidate provides an accurate and reasonably detailed description of research into the role of emotional factors in memory that demonstrates relevant knowledge and understanding. For example, an accurate and reasonably detailed description into the emotional factors, which both enhance and have a negative effect on memory, is offered.	**12-10**	**Informed commentary** - Within the time constraints for this part of the question, there is effective use of material to address the question and provide an informed commentary. - Effective analysis and evaluation of material. - Broad range of issues and/or evidence in reasonable depth, or a narrower range in greater depth. - The structure is generally clear and coherent.
5-4	**Less detailed but generally accurate** The candidate provides a less detailed but generally accurate description of research into the role of emotional factors in memory that demonstrates relevant knowledge and understanding. For example, the candidate gives a less detailed but generally accurate account of research into flashbulb memories and/or repression.	**9-7**	**Reasonable commentary** - There is appropriate selection of material to address the question, but this is not always used effectively to produce a reasonable commentary. - Reasonable analysis and evaluation of material. - A range of issues and/or evidence in limited depth, or a narrower range in greater depth.
3-2	**Basic** The candidate provides a basic description of research into the role of emotional factors in memory that demonstrates some relevant knowledge and understanding but lacks detail and may be muddled. For example, a basic outline of only one study – such as that of Williams –is identifiable.	**6-4**	**Basic commentary** - The selection and use of material provides only a basic commentary. - Basic analysis and evaluation of material. - Superficial consideration of a restricted range of issues and/or evidence.
1-0	**Very brief/flawed or inappropriate** The candidate provides a description which is very brief/flawed or an inappropriate description that fails to demonstrate any knowledge or understanding of the topic. For example, the candidate has described research into an unrelated topic or the description is incorrect.	**3-0**	**Rudimentary/absent or irrelevant commentary** - The selection and use of material provides only a rudimentary commentary, or commentary is absent or wholly irrelevant. - Analysis and evaluation just discernible or absent.

2 (a) Describe the multi-store model of memory.   *(6 marks)*

Marking Criteria	Marks	Performance Descriptions
A number of theorists have attempted to describe the basic architecture of the memory system, most notably Atkinson and Shiffrin (1968). The multi-store model of memory (MSM) makes a conceptual distinction between sensory, short-term and long-term memory. These stores form the basic structure - and are the focus of the model - and cognitive processes - such as attention and rehearsal - control information flow. Sensory stores hold information briefly and are modality specific. The short-term store is of limited capacity (7+/-2 items) and limited duration (up to about 30 seconds), and encoding is normally assumed to be acoustic. The long-term store would appear to be essentially unlimited in capacity and can hold information over extremely long periods of time; encoding is semantic, or possibly visual, acoustic, etc depending on the stimulus.	**6**	**Accurate and reasonably detailed** The candidate provides an accurate and reasonably detailed description of the multi-store model of memory that demonstrates relevant knowledge and understanding. For example, the candidate provides an accurate description of both structures and processes or a detailed fully annotated diagram is provided.
The processes said to be involved in the MSM are as follows; environmental information enters a sensory store; if attended to then is further processed by the short-term memory (STM). Some of this processed information will be transferred to long-term memory (LTM), and this transfer process often (but not always) depends on rehearsal. The model is essentially sequential.	**5-4**	**Less detailed but generally accurate** The candidate provides a less detailed but generally accurate description of the multi-store model of memory that demonstrates relevant knowledge and understanding. For example, the candidate provides a less detailed description, although generally accurate, or the stores are described accurately and in detail, but no or little reference is made to processes.
	3-2	**Basic** The candidate provides a basic description of the multi-store model of memory that demonstrates some relevant knowledge and understanding, but lacks detail and may be muddled. For example, the description lacks detail and/or clarity (eg a basic outline of stores only is identifiable).
If candidates offer a detailed annotated diagram, this can potentially receive the full 6 marks, although examiners are asked to be cognisant of the Quality of Written Communication mark.	**1-0**	**Very brief/flawed or inappropriate** The candidate provides a description which is very brief/flawed or an inappropriate description that fails to demonstrate any knowledge or understanding of the topic. For example, the candidate has offered the wrong model or the description of the MSM is incorrect.

2 (b) (i) Outline **one** explanation of forgetting in short-term memory (STM). *(3 marks)*

(ii) Outline **one** explanation of forgetting in long-term memory (LTM). *(3 marks)*

Marking Criteria	Marks	Performance Descriptions (for each explanation)
In short term memory, the explanations most likely to be offered are decay and displacement. In long-term memory, decay, interference, repression, cue dependent forgetting and retrieval failure theory are likely to be included in answers. For both STM and LTM other appropriate explanations are of course acceptable. With decay (STM or LTM) there is an assumption that a memory trace or engram - which may be a neurophysiological trace - degrades over time. The process of decay is different in STM and in LTM. In STM, it may be considered that the 'active trace', which is delicate and liable to disruption, corresponds roughly to STM, and according to decay theory, forgetting from STM is due to disruption of the active trace. However, in LTM, decay theory can explain forgetting if it is assumed that decay occurs through disuse, so that over time the trace eventually decays away.	**3**	**Accurate and reasonably detailed** The candidate provides an accurate and reasonably detailed description of an explanation of forgetting that demonstrates relevant knowledge and understanding. For example, the candidate has clearly outlined an explanation in reasonable detail, perhaps also giving an example which illustrates the explanation.
Displacement (STM) refers to existing memory being displaced from STM by newer information. There is a distinction between this and retroactive interference (RI) and the two terms must not be used interchangeably. Interference (LTM) is the tendency for one memory to affect (negatively) or interfere with the accurate retrieval of another memory. It may be either retroactive or proactive. RI is not likely to operate in STM, although proactive interference (PI) may do (some researchers suggest that PI operates in the Peterson and Peterson paradigm); a generic answer on 'interference' will not attract credit unless its relevance to either STM and LTM is made explicit.	**2**	**Less detailed but generally accurate** The candidate provides a less detailed but generally accurate explanation of forgetting that demonstrates relevant knowledge and understanding. For example, an explanation is outlined in less (but accurate) detail, maybe without an example.
Retrieval failure theory (LTM) is an accessibility problem where an individual fails to retrieve an item which they have previously learned. This may be accessibility, rather than an availability problem. For example, in cue-dependent forgetting, information stored in memory is inaccessible unless a specific trigger acts as a cue to aid retrieval. State dependent forgetting is also an acceptable explanation. Repression (LTM) refers to the fact that a memory may be placed (automatically, not consciously) beyond conscious awareness into the unconscious mind, from where retrieval is difficult, although Freud did maintain that repressed memories would affect conscious thought, desire and action.	**1**	**Basic** The candidate provides a basic description of an explanation of forgetting that demonstrates some relevant knowledge and understanding but lacks detail and may be muddled. For example, an explanation may just be named, but no outline explanation is given.
Candidates may use appropriate research to illustrate (not substitute for) their explanation (eg the work of Myers and Brewin work on repression, 1994; the work of Jenkins and Dallenbach 1924; and that of Tulving and Pstoka 1971 on interference). If a candidate names one forgetting mechanism but goes on to describe another (eg names interference but describes displacement) then the description may be credited. It should be noted that the question does not ask for identification and then explanation, so an explanation is all that is needed to achieve the full three marks.	**0**	**Flawed or inappropriate** The candidate provides a description which is flawed or an inappropriate description that fails to demonstrate any knowledge or understanding or the topic.

2 (c) Outline and evaluate research into eyewitness testimony (EWT). *(18 marks)*

Marking Criteria	
AO1 criteria are satisfied by a description of research evidence (theories and/ or studies) into eyewitness testimony (EWT). This could be research directly concerned with EWT such as the work of Elizabeth Loftus, or more general research into memory which is related to EWT, such as schema theory, reconstructive memory, or interference theory. Candidates may make this kind of material (either empirical or theoretical) creditworthy by using it effectively.	Commentary could include methodological and other criticisms of the studies (such as issues concerned with validity, sampling and demand characteristics). However, studies which suggest that EWT may be more accurate than is sometimes thought could also be legitimately used, for example, the work of Foster et al. (1994) and of Yuille and Cutshall (1986) EWT for real-life crimes. It is also legitimate to discuss how the knowledge and understanding from memory research may be used to improve the reliability and/or effectiveness of EWT, for example, Geiselman's work on the cognitive interview, or work on identity parades.
AO2 criteria are likely to be satisfied by an evaluation of the studies and/or theories. There are a large number of studies on EWT, for example, the work of Loftus on post-event information and work on leading questions. There is also work on the effect of characteristics such as gender, race and arousal on reliability and accuracy of EWT. Other research includes that into weapon focus and false memory syndrome. All of this could be creditworthy. Bartlett's work on reconstructive memory is creditworthy only in as much as the candidate uses it to support an argument about EWT; Bartlett did not himself investigate EWT. Alternatively, work such as Bartlett's may be used in analysis or evaluation and attract AO2 credit.	In this question, the breadth/depth issue is important. Candidates may cover a wide range of material in less detail or a lesser range in more detail. Either way of approaching the question is acceptable, and examiners must be alert to the trade off between breadth and depth.

2 (c)

Marks	Performance Descriptions	Marks	Performance Descriptions
	AO1: Description of research into eyewitness testimony (EWT).		**AO2:** Evaluation of research into eyewitness testimony (EWT).
6	**Accurate and reasonably detailed** The candidate provides an accurate and reasonably detailed outline description of research into EWT that demonstrates relevant knowledge and understanding. For example, the candidate has summarised a number of research studies such as those by Loftus, or a lesser number are described but in more detail.	**12-10**	**Informed commentary** • Within the time constraints for this part of the question, there is effective use of material to address the question and provide an informed commentary. • Effective analysis and evaluation of material. • Broad range of issues and/or evidence in reasonable depth, or a narrower range in greater depth. • The structure is generally clear and coherent.
5-4	**Less detailed but generally accurate** The candidate provides a less detailed but generally accurate outline description of research into EWT that demonstrates relevant knowledge and understanding. For example, the candidate gives a less detailed but generally accurate account of research such as that of Loftus possibly by making reference to more generic findings.	**9-7**	**Reasonable commentary** • There is appropriate selection of material to address the question, but this is not always used effectively to produce a reasonable commentary. • Reasonable analysis and evaluation of material. • A range of issues and/or evidence in limited depth, or a narrower range in greater depth.
3-2	**Basic** The candidate provides a basic description of research into EWT that demonstrates some relevant knowledge and understanding but lacks detail and may be muddled. For example, a basic outline of only one study is identifiable.	**6-4**	**Basic commentary** • The selection and use of material provides only a basic commentary. • Basic analysis and evaluation of material. • Superficial consideration of a restricted range of issues and/or evidence.
1-0	**Very brief/flawed or inappropriate** The candidate provides a description which is very brief/flawed or an inappropriate description that fails to demonstrate any knowledge or understanding of the topic. For example, the candidate has described research into an unrelated topic or the description is incorrect.	**3-0**	**Rudimentary/absent or irrelevant commentary** • The selection and use of material provides only a rudimentary commentary, or commentary is absent or wholly irrelevant. • Analysis and evaluation just discernible or absent.

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3 (a) Describe stages in the formation of attachments (eg Schaffer). *(6 marks)*

Marking Criteria	Marks	Performance Descriptions
Although the question mentions Schaffer, this is only as an example, and other researchers' work on the stages of attachment is equally as acceptable (eg Bowlby). Schaffer (1996) identifies four stages in the development of attachments – the asocial stages (0-6 weeks), indiscriminate attachments (6 weeks - 7 months), specific attachments (7-11 months) and the stages of multiple attachments (9 months +). Bowlby's original work identified four (later five) stages – indiscriminate orienting and signalling; preferential orienting (5-7 months); discriminated attachment (7-9 months, identified by proximity seeking behaviour, stranger anxiety and separation protest); goal corrected partnership (child accommodating to mother's needs (3 yrs +) and the fifth stages in older children – lessening of attachment as measured by proximity, but the relationship being based on more abstract considerations. On the question paper, Schaffer was incorrectly spelt Shaffer. An erratum notice brought this to the candidate's attention on the day of the exam. Candidates should not be penalised in terms of Quality of Written Communication (QoWC) marks or other marks if they spell Schaffer as Shaffer.	**6** **5-4** **3-2** **1-0**	**Accurate and reasonably detailed** The candidate provides an accurate and reasonably detailed description of the stages in the formation of attachments that demonstrates relevant knowledge and understanding. For example, the candidate provides an accurate and reasonable detailed description of the stages outlined by either Bowlby and/or Schaffer. **Less detailed but generally accurate** The candidate provides a less detailed but generally accurate description of the stages in the formation of attachments that demonstrates relevant knowledge and understanding. For example, the candidate provides a less detailed description of Schaffer's stages. **Basic** The candidate provides a basic description of the stages in the formation of attachments that demonstrates some relevant knowledge, but lacks detail and may be muddled. **Very brief/flawed or inappropriate** The candidate provides a description which is very brief/flawed or an inappropriate description that fails to demonstrate any knowledge or understanding of the topic. For example, the candidate describes a theory of attachment, or the stages are described incorrectly.

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3 (b) Outline findings **and/or** conclusions of research into effects of privation.

(*6 marks*)

	Performance Descriptions
6	**Accurate and reasonably detailed** The candidate provides an accurate and reasonably detailed outline description of the findings and/or conclusions of research into effects of privation that demonstrates relevant knowledge and understanding. For example, the findings of a number of studies are outlined in detail, or one study is outlined in more detail.
5-4	**Less detailed but generally accurate** The candidate provides a less detailed but generally accurate outline description of the findings and/or conclusions of research into effects of privation that demonstrates relevant knowledge and understanding. For example, generic findings and/or conclusions are outlined.
3-2	**Basic** The candidate provides a basic outline description of the findings and/or conclusions of research into effects of privation that demonstrates some relevant knowledge and understanding but lacks detail and may be muddled. For example, there is only a basic description of findings/conclusions or the findings/conclusions are muddled.
1-0	**Very brief/flawed or inappropriate** The candidate provides a description which is very brief/flawed or an inappropriate description that fails to demonstrate any knowledge or understanding of the topic. For example, the candidate does not mention the effects of privation, or inappropriate research is cited.

Marking criteria

For this question research on the effects of privation (eg Curtis' work on Genie, Koluchova's research on the Czech twins, or Hodges and Tizard's study of institutionalisation) may be creditworthy. The distinction between privation and extreme deprivation is not clear and differs from researcher to researcher; examiners should be alert to this. However, privation is normally taken to mean the lack or absence of something (normally an attachment figure) when there has not been an opportunity to form an attachment in the first place.

For credit to be given the answer must focus on the effects of privation, hence a description of the procedures of Hodges and Tizard's study would not attract credit, although a description of the findings in relation to the effects of privation would. Research includes theories and/or studies, so theoretical work into the effects of privation would be as acceptable as an answer based on studies.

'Findings' may be difficult to define in relation to case studies. The description of the circumstances in which say, Genie was found will not attract much credit unless an explicit link is made to the effects of privation.

Breadth vs. depth may be an issue here; candidates may describe a limited number of studies in detail or more research in less detail. The findings of one study, outlined in detail, could potentially attract the full 6 marks.

3 (c) 'Psychologists have proposed a number of explanations of attachment, for example learning theory and Bowlby's theory.'

Discuss **one or more** explanations of attachment.

(18 marks)

Marking Criteria
AO1 criteria are satisfied by a description of one or more explanations of attachment such as learning theory and Bowlby's theory. **AO2** criteria would be satisfied by evaluation of the explanation(s) of attachment.	Social learning theories of attachment (eg Hay and Vespo, 1988) are increasingly in favour, but candidates must focus on attachment, for example, by talking about modelling and direct instruction (often by parents) in relation to attachment behaviour.
The examples given in the quotation are only examples and other theories of attachment are equally as acceptable, such as Freud's theory or Social Learning theory of attachment. Work on features such as caregiver sensitivity may also be used as long as the focus of the answer is on explanations of attachment.	Bowlby's theory of attachment focuses on attachment being an innate and adaptive process, and the role of social releasers is emphasised. Again, candidates who focus on other aspects of Bowlby's work such as his maternal deprivation hypothesis (MDH), without linking it to his theory of attachment, will find that their work does not attract much credit.
Freud's theory of attachment may be used. It should be noted that a general description of Freudian theory (such as a detailed account of the psychosexual stages without reference to attachment) is unlikely to attract much credit.	**AO2** marks may be gained by using the explanations effectively to contrast with each other, for example, Freud's theory and Bowlby's theory may be contrasted with learning theory. Equally, research such as that of Harlow (eg 1959) or Schaffer and Emerson on multiple attachments may be used effectively to gain **AO2** credit.
Learning theories of attachment focus on the processes of operant and classical conditioning in attachment. Again, generic descriptions of these processes which are not rooted in the context of attachment will not attract much credit.	There may be an issue of breadth versus depth in answers to this question. Answers which focus on one explanation or a limited range of explanations in depth are as acceptable as those which examine a wider range of explanations but in less detail. There is no requirement for candidates to address the quotation directly.

3 (c)

Marks	Performance Descriptions	Marks	Performance Descriptions
	AO1: Description of **one or more** explanations of attachment.		**AO2:** Evaluation of **one or more** explanations of attachment.
6	**Accurate and reasonably detailed** The candidate provides an accurate and reasonably detailed description of one or more explanations of attachment that demonstrates relevant knowledge and understanding. For example, the candidate has summarised a number of explanations such as learning theory and Bowlby's theory, or a lesser number are described but in more detail.	**12-10**	**Informed commentary** • Within the time constraints for this part of the question, there is effective use of material to address the question and provide an informed commentary. • Effective analysis and evaluation of material. • Broad range of issues and/or evidence in reasonable depth, or a narrower range in greater depth. • The structure is generally clear and coherent.
5-4	**Less detailed but generally accurate** The candidate provides a less detailed but generally accurate description of one or more explanations of attachment that demonstrates relevant knowledge and understanding. For example, the candidate gives a less detailed but generally accurate account of explanations such as that of Bowlby and/or learning theory of attachment.	**9-7**	**Reasonable commentary** • There is appropriate selection of material to address the question, but this is not always used effectively to produce a reasonable commentary. • Reasonable analysis and evaluation of material. • A range of issues and/or evidence in limited depth, or a narrower range in greater depth.
3-2	**Basic** The candidate provides a basic description of one or more explanations of attachment that demonstrates some relevant knowledge and understanding but lacks detail and may be muddled. For example, a basic outline of one explanation is identifiable.	**6-4**	**Basic commentary** • The selection and use of material provides only a basic commentary. • Basic analysis and evaluation of material. • Superficial consideration of a restricted range of issues and/or evidence.

3-0	**Rudimentary/absent or irrelevant commentary**
	• The selection and use of material provides only a rudimentary commentary, or commentary is absent or wholly irrelevant.
	• Analysis and evaluation absent or just discernible.

1-0	**Very brief/flawed or inappropriate**
	The candidate provides a description which is very brief/flawed or an inappropriate description that fails to demonstrate any knowledge or understanding of the topic. For example, the candidate has described research into an unrelated topic or the description is incorrect.

4 (a)   Describe Bowlby's maternal deprivation hypothesis.   *(6 marks)*

Marking Criteria		**Performance Descriptions**
For this question only answers which focus on Bowlby's maternal deprivation hypothesis (MDH) are acceptable. Bowlby's theory of attachment per se is not creditworthy.	**6**	**Accurate and reasonably detailed** The candidate provides an accurate and reasonably detailed description of Bowlby's MDH that demonstrates relevant knowledge and understanding. For example, the hypothesis and examples of the consequences of maternal deprivation are both described accurately.
Bowlby used the term 'maternal deprivation' either to mean a failure to develop a maternal bond or to refer to bond disruption. He suggested that infants/children should not be deprived of contact ('a warm, intimate and continuous relationship') with their mother or permanent mother substitute during a critical period when the primary attachment relationship is being formed (about 6 months to 3 years). However, he also thought that there was a continuing risk up to about age 5.	**5-4**	**Less detailed but generally accurate** The candidate provides a less detailed but generally accurate description of Bowlby's MDH that demonstrates relevant knowledge and understanding. For example, the hypothesis is described in less detail or only the consequences of maternal deprivation are described.
The consequences of deprivation might include long term and possibly irreversible emotional and intellectual harm including delinquency, emotional problems in adolescence, language and other cognitive problems. Deprivation dwarfism and affectionless psychopathy might also be described. References to the '44 juvenile thieves' study (Bowlby, 1944) as well as other studies may be creditworthy, for example, by identifying the possible link between affectionless psychopathy and lack of continuous maternal care at an early age.	**3-2**	**Basic** The candidate provides a basic description of Bowlby's MDH that demonstrates some relevant knowledge and understanding but lacks detail and may be muddled. For example, only a basic outline of one consequence of maternal deprivation is offered.
	1-0	**Very brief/flawed or inappropriate** The candidate provides a description which is very brief/flawed or an inappropriate description that fails to demonstrate any knowledge or understanding of the topic.

4 (b) Outline findings **and/or** conclusions of research into the effects of day care on children's social development. *(6 marks)*

Marking Criteria		Performance Descriptions
The term day care may refer to nursery care, day care by family members other than parents or to childminding. The effects of day care are complicated by a number of variables and it is difficult to tease out the social effects as a result of day care and those as a result of other variables which may exist (eg separation or physical deprivation).	**6**	**Accurate and reasonably detailed** The candidate provides an accurate and reasonably detailed outline description of the findings and/or conclusions of research into the effects of day care on children's social development that demonstrates relevant knowledge and understanding. For example, a range of findings/conclusions is summarised in some detail, or the findings from one piece of research outlined in detail.
However, some research has shown that day care can have positive effects on social development. Candidates may include research such as that of Clarke-Stewart et al (1991) of 150 children aged 2 and 3 in day care in Chicago- they found that the children in day care had more advanced peer relationships. Shea's (1981) study of playground behaviour found that the sociability of 3 and 4 year olds increased over their first 10 weeks at nursery school, as measured by factors such as aggression and frequency of peer interaction. There is of course much more research which is potentially creditworthy, including that of Scarr and Thompson (1994) and of Melhuish et al (1990).	**5-4**	**Less detailed but generally accurate** The candidate provides a less detailed but generally accurate outline description of the findings and/or conclusions of research into the effects of day care on children's social development that demonstrates relevant knowledge and understanding. For example, the candidate gives a less detailed, but generally accurate account of the findings/conclusions of research into the effects of day care on children's social development.
The 2001 NICHD study found that caregivers rated children in day care as more negative in peer interactions, but this was not supported by observational data. Pennebaker et al (1981) found that shy or unsociable children can find the nursery experience threatening and that this can have a negative effect on their social development.	**3-2**	**Basic** The candidate provides a basic outline description of the findings and/or conclusions of research into the effects of day care on children's social development that demonstrates some relevant knowledge and understanding but lacks detail and may be muddled.
	1-0	**Very brief/flawed or inappropriate** The candidate provides a description which is very brief/flawed or an inappropriate description that fails to demonstrate any knowledge or understanding of the topic. For example, the candidate refers to cognitive development, or the description of findings and/or conclusions is incorrect.

4 (c)   Outline and evaluate research into individual differences in attachment.

(18 marks)

Marking Criteria
AO1 criteria are likely to be satisfied by a description of research into individual differences in attachment. It is likely that most candidates will chose to write about Ainsworth's Strange Situation research and other research developed from her original work. However, other relevant research may also be creditworthy. For example, work which takes the lifespan approach to individual differences in attachment, such as research using the Adult Attachment Interview, may also be creditworthy, as may work on cross-cultural variations in attachment. **AO2** criteria are likely to be satisfied by an evaluation of the studies and/or theories. The work of Ainsworth is likely to be chosen here. Ainsworth used a structured situation and controlled observation to see how an infant behaves in a number of situations. Stranger anxiety, separation anxiety and reunion behaviour were measured, although not all measures were used in all of her studies. Three main types of children – and a number of subgroups - were identified. Subsequent research identified a fourth type (D) although this may be hard to classify. **AO1** points about Ainsworth's work include the fact that the research would appear to be generally valid and reliable (Main et al 1985). It has been suggested that changes which are seen in attachment types over time are often associated with changes in the form of care which children experience (such as parental separation; Melhuish 1993). A number of measures are taken, and these may usefully be used across a number of cultures to give a measure of attachment types in children. However, the Strange Situation has been criticised for being unethical, and some researchers have suggested that the unrealistic situation affects the results – attachment types may appear stronger in the Strange Situation than at home. Some of the early work using the strange situation used very small samples, although the Strange Situation has been used extensively in a wide variety of settings. In addition, it has been suggested that it is the relationship and not the child which is being tested, as different attachment types are observed when the father is the 'known' adult in the Strange Situation. Some psychologists have suggested that an (unacceptable) value judgement of 'B is best' is accepted by some researchers.

4 (c)

Marks	Performance Descriptions	Marks	Performance Descriptions
	AO1: Outline of research evidence.		**AO2:** Evaluation/assessment of research.
6	**Accurate and reasonably detailed** The candidate provides an accurate and reasonably detailed outline of psychological research into individual differences in attachment that demonstrates relevant knowledge and understanding. For example, the candidate has described research into individual differences, such as that of Ainsworth, in detail. Cross cultural research or research into individual differences in attachment in adults may also be outlined.	**12-10**	**Informed commentary** • Within the time constraints for this part of the question, there is effective use of material to address the question and provide an informed commentary. • Effective analysis and evaluation of material. • Broad range of issues and/or evidence in reasonable depth, or a narrower range in greater depth. • The structure is generally clear and coherent.
5-4	**Less detailed but generally accurate** The candidate provides a less detailed but generally accurate outline of psychological research into individual differences in attachment that demonstrates relevant knowledge and understanding. For example, the candidate gives a less detailed but generally accurate account of research such as that of Ainsworth.	**9-7**	**Reasonable commentary** • There is appropriate selection of material to address the question, but this is not always used effectively to produce a reasonable commentary. • Reasonable analysis and evaluation of material. • A range of issues and/or evidence in limited depth, or a narrower range in greater depth.
3-2	**Basic** The candidate provides a basic outline of psychological research into individual differences in attachment that demonstrates some relevant knowledge and understanding but lacks detail and may be muddled. For example, only a basic outline of Ainsworth's research is identifiable.	**6-4**	**Basic commentary** • The selection and use of material provides only a basic commentary. • Basic analysis and evaluation of material. • Superficial consideration of a restricted range of issues and/or evidence.

1-0	**Very brief/flawed or inappropriate**
	The candidate provides an outline which is very brief/flawed or an inappropriate description that fails to demonstrate any knowledge or understanding of the topic. For example, the candidate has described research into an unrelated topic or the description is incorrect.

3-0	**Rudimentary/absent or irrelevant commentary**
	• The selection and use of material provides only a rudimentary commentary, or commentary is absent or wholly irrelevant.
	• Analysis and evaluation absent or just discernible.

Assessment Grid

Question	Part	AO1	AO2	Total
1	(a)	6		6
	(b)	6		6
	(c)	6	12	18
Total for Q.1		**18**	**12**	**30**
2	(a)	6		6
	(b)	6		6
	(c)	6	12	18
Total for Q.2		**18**	**12**	**30**
3	(a)	6		6
	(b)	6		6
	(c)	6	12	18
Total for Q.3		**18**	**12**	**30**
4	(a)	6		6
	(b)	6		6
	(c)	6	12	18
Total for Q.4		**18**	**12**	**30**
QoWC		2		2
Total for unit		**38**	**24**	**62**
% weighting AS		20.4	12.9	
% weighting A2		10.2	6.5	