

Psychology

General Certificate of Secondary Education **1989/04**

Paper 4

Mark Scheme for June 2010

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Question			Syllabus Ref	Expected Answer	Marks	Rationale
Source A: Aspects of Morality Every now and again, there are cases of young children committing serious crimes, such as murder or robbery. When they do, it often starts a debate about whether children really understand right from wrong. English law says that a child cannot be charged with a crime before the age of 10. Piaget said 10 year old children have the same morality as an adult. He believed that they have entered the autonomous stage of moral development. Before this stage, children's morality has not developed properly and they are in the heteronomous stage of moral development.						
1	(a)			From the Source; Identify one example of a serious crime committed by children. 1 mark for 'murder' or 'robbery' or something of same meaning.	1 x AO2	
1	(b)			Name the stage of moral development that children enter at the age of 10. 1 mark for 'autonomous'	1 x AO2	

Question			Syllabus Ref	Expected Answer	Marks	Rationale
2				<p>Outline one difference between the heteronomous and autonomous stages of morality.</p> <p>1 mark for identifying a feature of the heteronomous stage or autonomous stage</p> <p>2nd mark for identifying the opposite feature of the other stage</p> <p>Examples of 1 mark answers:</p> <p>“children show moral realism” (1)</p> <p>“in the autonomous stage, we focus on consequences of actions more” (1)</p> <p>Examples of 2 mark answers:</p> <p>“one difference is whether children think laws are flexible (1) or fixed (1)”</p> <p>“we think immoral actions should be punished as much as possible in the heteronomous stage (1) as opposed to thinking the punishment should fit the crime (1)”</p> <p>“one difference between the stages is that in the heteronomous stage children look to authority for the rules (1) but in the autonomous stage that they make more moral judgements for themselves (1)”</p>	2 x AO1	<p>If candidate has named opposing features but not attributed them to stages then you can award 2 marks.</p> <p>If candidate identifies two opposing features but attributes them to wrong stages then you can still award 2 marks.</p> <p>If candidate identifies a feature for each stage but not opposing, award 1 mark.</p> <p>The difference between stages needs to be more than implied for both marks e.g. “in the heteronomous stage, children believe rules change and in autonomous stage they don’t change” award only 1 mark.</p> <p>No credit for reference to age differences as a feature.</p> <p>No credit if candidate simply states children are more/less advanced in particular stage.</p>

Question			Syllabus Ref	Expected Answer	Marks	Rationale
3				<p>Kohlberg stated there are <i>three</i> levels of moral development. Look at the following diagram. Draw a line from each level of morality to its correct definition.</p> <div><div><div>LEVEL</div><div>Pre-Conventional</div><div>Conventional</div><div>Post-Conventional</div></div><div><div>DEFINITION</div><div>A person's moral reasoning varies depending on the situation.</div><div>A person's moral reasoning focuses on the self and what they can gain from their actions.</div><div>A person's moral reasoning is based on the approval of others and keeping social order.</div><div>A person's moral reasoning operates according to universal principles, such as dignity and respect.</div></div></div> <p>1 mark for each correctly matched line as shown above.</p>	3 x AO1	<p><i>For each extra line drawn above the maximum of three, deduct one mark.</i></p>

Question			Syllabus Ref	Expected Answer	Marks	Rationale
4				<p>Outline why Gilligan stated Kohlberg's theory of moral development was gender biased.</p> <p>1 mark for each brief or basic response eg "he only studied boys", "he said boys were more moral", "because he was biased against girls"</p> <p>2 marks for a more developed and detailed response eg "he only studied boys (1) so was not in a position to reliably report on the morality of girls (1)", "he said boys were more moral (1) but Gilligan found that both sexes were equally moral (1)", "Gilligan argued that boys and girls may have different focuses on morality (1) but boys were not therefore more moral (1)"</p>	2 x AO1	<p>Candidate can earn both marks by offering two distinct points e.g. 'Kohlberg only studied boys' and 'Kohlberg suggested boys are more morally advanced than girls'.</p>
5				<p>Explain one disadvantage of using a case study in psychological research.</p> <p>1 mark for a brief or basic response eg "it only looks at one person", "it's not very scientific", "researchers get too involved"</p> <p>2 marks for a more developed or detailed response eg "because samples are small (1) it's hard to make generalisations (1)"</p> <p>eg "you cannot really establish cause and effect (1) because of the lack of control"</p> <p>eg "researchers get too involved (1) making findings biased (1)"</p>	2 x AO2	<p>Do not credit the idea that case studies are time consuming nor issues related to expense.</p> <p>If candidate only recognises "small sample" (or similar) this is evaluative enough for 1 mark.</p>

Question			Syllabus Ref	Expected Answer	Marks	Rationale
6	(a)			<p>Describe the social learning theory of moral development.</p> <p><i>Credit 1 mark for each clear and accurate feature of this theory eg role of observation, role of imitation, reference to role models, effect of reinforcement, internalisation.</i></p> <p><i>If a feature is well described and developed it can earn up to 2 marks eg “children learn morals from role models (1) who are people that they identify with (1)”, “moral behaviour may increase through reinforcement (1) but may decrease if punished (1)”</i></p> <p><i>Only award full marks if description is coherent and detailed.</i></p> <p><i>Only award full marks if SLT has been explicitly applied to morality otherwise award a maximum of 4 marks.</i></p>	<p>5 x AO1</p>	<p>Candidates may choose to describe SLT using the concepts of Attention / Retention / Reproduction / Motivation. This is equally creditworthy.</p> <p>If candidate describes a study into SLT e.g. the Bobo doll study, credit any relevant use of terms, otherwise maximum 1 mark (for relevant study).</p> <p>If awarding 3 or more marks, there must be some level of description, not just a listing of terms.</p> <p>Examples of morality are not creditworthy in themselves, but allow the candidate to access full marks.</p> <p>Candidate must mention the word ‘model’ to be awarded credit rather than simply mentioning the person eg mother, authority figure, peer.</p> <p>It is appropriate to export/import AO1/ AO2 marks between responses to parts (a) and (b).</p>

Question			Syllabus Ref	Expected Answer	Marks	Rationale
6	(b)			<p>Outline one criticism of the social learning theory of moral development.</p> <p>1 mark for a brief or basic criticism eg “it ignores nature”, “how come bad behaviour continues even if punished?”, “it can’t explain how morality develops in stages”, “the theory is based on artificial evidence”</p> <p>2 marks for a more developed and detailed response eg “it focuses too much on behaviour (1) ignoring the cognitive part of morality”, “our sense of right and wrong may be instinctive (1) rather than something we have to learn (1)”, “it can’t explain how morality develops in stages (1) as it suggests how your morality develops will vary depending on experience (1)”</p>	<p>2 x AO2</p>	<p>If the criticism given is a general criticism of SLT, it can be awarded 2 marks.</p> <p>If candidate is criticising a study this criticism must be related to the theory itself to gain any credit.</p> <p>If criticism says “it ignores other theories” eg Kohlberg, this is not enough to gain credit. The only exception is biological theory/ explanation because of the clear reference to biology in its name. However, can credit statements like “it ignores stages or moral development” (for Kohlberg).</p> <p>It is appropriate to export/import AO1/ AO2 marks between responses to parts (a) and (b).</p>

Question			Syllabus Ref	Expected Answer	Marks	Rationale
Source B: Perception The following conversation took place between a student and her Art teacher. Student: I'm not happy with my drawing. It doesn't look right. Teacher: How about using more depth cues to make it look more 3-dimensional? Student: I have already tried to use linear perspective. Teacher: I can see that. You have done a good job. But what other cues could you use? Student: Do you mean things like texture gradient and superimposition? Teacher: Exactly.						
7	(a)			From the Source; State why the teacher said the student should use more depth cues. 1 mark for 'to make it look more 3-dimensional' or similar response. Can accept '3D' instead of 3-dimensional.	1 x AO2	
7	(b)			Name one depth cue. 1 mark for linear perspective, texture gradient or superimposition, or for an alternative name for any one of these cues eg overlapping for superimposition.	1 x AO2	Do not credit any depth cue that is not in the source. It needs to be the full term for credit, e.g. 'texture gradient' and not just 'texture'
8				The Source shows one way in which knowledge about depth perception is used in everyday life. Outline one other way in which knowledge about depth perception could be applied in everyday life. 1 mark for a brief or basic response, perhaps just identifying an area of application eg "driving schools", "training pilots", "shooting practice", "in sport coaching",	2 x AO2	Only award two marks for an actual application of research Award maximum 1 mark where candidate gives an example from real life where depth cues are used (eg walking upstairs, catching balls, crossing roads, etc). However, this example must involve <i>doing</i> something e.g. do not credit statements like

Question			Syllabus Ref	Expected Answer	Marks	Rationale
				<p><i>“on patients who have just gained their sight”</i> <i>2 marks for a developed, detailed, sophisticated response eg “the government could reduce the number of road traffic accidents (1) by understanding how people perceive the road when they are driving (1)”, “understanding depth perception may help a tennis player (1) to accurately and quickly judge the distance between themselves and a ball (1)”, “emphasising the use of monocular cues (1) may help the recovery of a person who has lost sight in one eye (1)”.</i></p>		<p>“I can see how far away the trees are when I look out of a window”.</p> <p>Do not credit applications unless they are related to <i>depth</i> perception.</p>
9				<p>There are three visual constancies used in perception:</p> <ul style="list-style-type: none"> • colour constancy, • shape constancy, • size constancy. <p>Outline how any one of the above constancies is used in perception.</p> <p><i>1 mark for a brief, basic or partially accurate response eg “colour constancy: seeing things as the same colour”, “shape constancy: when a door opens we know it hasn’t really changed”, “size constancy: a person walking off appears to get smaller but doesn’t”</i></p> <p><i>2 marks for a developed, detailed and clear response eg “colour constancy: when objects are seen in dark and light they appear to change colour (1) yet we perceive their colour as being the same regardless (1)”</i> <i>eg “shape constancy: if we rotate around an object the image on the back of our eye will change shape (1) yet we know that the object had not actually changed shape (1)”</i> <i>eg “if a person walks into the distance we use size constancy (1) to judge how far away they are because we know they will not actually be getting smaller (1)”</i></p> <p><i>N.B. If type of constancy is not clearly identified or if the</i></p>	2 x AO1	<p>Rule of thumb:</p> <p>1 mark for how something actually <i>is</i> (eg “it <i>looks/ appears</i> different”)</p> <p>! mark for how something is <i>held constant</i> by our perceptual abilities (eg “but we <i>perceive/know</i> it to be the same”).</p>

Question			Syllabus Ref	Expected Answer	Marks	Rationale
				<i>type of constancy and description do not match, then credit a maximum of 1 mark.</i>		
10	(a)			<p>The role of nature in perception has been investigated using research such as infant (neonate) studies and deprivation studies.</p> <p>Describe one study into the role of nature in perception.</p> <p>Credit 1 mark for each clear and accurate feature (eg aim, design, procedure, sample, finding, conclusion) of a relevant study eg Gibson & Walk's visual cliff, Fantz's experiment into preferences for patterns, Bower's experiment into size constancy using boxes. Research must investigate physical perception. Only award full marks if description is coherent and detailed. Only award full marks if both methodology and findings/conclusion are covered.</p>	4 x AO1	<p>Drawings of apparatus can be credited were it helps to make the study clearer e.g. Gibson and Walk.</p> <p>Do not credit reference to the terms 'neonate/infant (or baby)' or 'deprivation' as these are referred to in the question.</p> <p>A conclusion must refer to something more than the term 'nature' such as "innate", "born with", etc.</p> <p>Conclusion needs to relate to study described rather than being a 'stand alone' statement about the role of nature in perception.</p> <p>Do not credit the word 'experiment' (or other method) on its own.</p> <p>It is appropriate to export/import AO1/ AO2 marks between responses to parts (a) and (b)</p>
10	(b)			<p>Outline one criticism of this study.</p> <p>1 mark for a brief, basic or general response eg "babies might be caused distress", "babies don't understand what is going on", "may not be confidential" "babies cannot communicate their perception"</p>	2 x AO2	<p>Criticisms can be methodological or ethical, but do not credit the term "unethical" by itself without an explanation.</p> <p>Although unlikely, it is possible to credit part (b) if there is no creditworthy response to</p>

Question			Syllabus Ref	Expected Answer	Marks	Rationale
				2 marks for a more developed or detailed response eg “babies don’t understand what is going on (1) so cannot withdraw themselves (1)”, “because babies had to be able to crawl (1) they may have experienced depth (1)”, “unusual circumstances(1) cannot be generalised to typical circumstances (1)”		part (a) if the criticism can be linked to an identifiable study, e.g. candidate may not describe a neonate study but make a valid generic criticism about using neonates. It is appropriate to export/import AO1/ AO2 marks between responses to parts (a) and (b)
11	(a)			<p>The role of nurture in perception has been investigated using research such as cross-cultural studies and readjustment studies.</p> <p>Describe one study into the role of nurture in perception.</p> <p>Credit 1 mark for each clear and accurate feature (eg aim, method, design, procedure, sample, finding, conclusion) of a relevant study eg Hudson’s study of African tribe’s perception of a hunting scene, Seagall’s study of the effect of culture on the Muller Lyer illusion. Research must investigate physical perception.</p> <p>Only award full marks if description is coherent and detailed.</p> <p>Only award full marks if both methodology and findings/conclusion are covered.</p>	4 x AO1	<p>Drawings can be credited were it helps to make the study clearer e.g. Hudson’s hunter picture.</p> <p>Do not credit reference to the terms ‘cross-cultural’ or ‘readjustment’ as these are referred to in the question.</p> <p>A conclusion must refer to something more than the term ‘nurture’ such as “learnt”, “role of experience”, etc.</p> <p>Conclusion needs to relate to study described rather than being a ‘stand alone’ statement about the role of nurture in perception.</p> <p>Do not credit the word ‘experiment’ (or other method) on its own.</p> <p>It is appropriate to export/import AO1/ AO2 marks between responses to parts (a) and (b)</p>

Question			Syllabus Ref	Expected Answer	Marks	Rationale
11	(b)			<p>Outline one criticism of this study.</p> <p>1 mark for a brief, basic or general response eg “ethnocentrism”, “other cultures may not know what they are consenting to”, “readjustment studies are often conducted on only one person”.</p> <p>2 marks for a more developed or detailed response eg “it can be difficult to know what other cultures can perceive (1) because of language barriers (1)”, “Stratton was the only person to try out the goggles (1) making it difficult to generalise (1)”, “Stratton adjusted back to his normal environment very early (1) which shows this type of perception is more normal (1)”.</p>	<p>2 x AO2</p>	<p>Criticisms can be methodological or ethical, but do not credit the term “unethical” by itself without an explanation.</p> <p>Although unlikely, it is possible to credit part (b) if there is no creditworthy response to part (a) if the criticism can be linked to an identifiable study, e.g. candidate may not describe a cross-cultural study but make a valid generic criticism about their methodology.</p> <p>In answers referring to Hudson’s study: Please note</p> <ul style="list-style-type: none"> • The <i>use of pictures</i> was artificial, rather than the set up itself. Therefore Hudson’s study is ecologically valid in the sense that he tested participants in a natural setting. • Do not credit ‘cultural bias’ or similar as only need two use cultures in cross-cultural research. • Can credit AO2 if candidate explains that when a texture gradient was added to the picture, the participants could interpret the picture correctly as this highlights a limitation of the original conclusion. <p>It is appropriate to export/import AO1/ AO2 marks between responses to parts (a) and (b)</p>

Question			Syllabus Ref	Expected Answer	Marks	Rationale
				<p>Source C: Stress</p> <p>A group of psychologists wanted to investigate whether noise was a cause of stress. They decided to carry out a field experiment in real factories. They compared workers from a noisy factory with workers from a quiet factory. The psychologists found that the workers from the noisy factory:</p> <ul style="list-style-type: none"> • had higher blood pressure, • had more days off sick, • reported less job satisfaction. <p>They concluded that the workers from the noisy factory had higher levels of stress than those in the quiet factory.</p>		
12	(a)			<p>From the Source;</p> <p>State the method used by the psychologists. 1 mark for 'field experiment', 'experiment', 'field study'</p>	<p>1 x AO2</p>	Do not credit the term "field" alone.
12	(b)			<p>Give the conclusion of the study.</p> <p>1 mark for 'workers from the noisy factory had higher levels of stress (than those in the quieter factory)' or similar statement</p>	<p>1 x AO2</p>	<p>Credit can be given if levels of stress in only noisy or quiet factory are referred to.</p> <p>The conclusion must refer to stress levels rather than measures e.g. blood pressure</p>
13				<p>Complete the table below to show the independent variable (IV) and one of the dependent variables (DV) in the study in Source C.</p> <p>Independent variable (IV) noise levels/ quiet or noisy factory or similar response ie has to be some reference to 'noise' and/or 'factory' but do not credit factory workers</p> <p>Dependent variable (DV) (level of) blood pressure/(number of) sick days/ (amount of) job satisfaction/level of stress</p>	<p>2 x AO2</p>	If candidate puts more than one answer in a box, credit their first answer only.

Question			Syllabus Ref	Expected Answer	Marks	Rationale
14				<p>Identify which type of <i>experimental subjects design</i> was used in the study in Source C.</p> <p>Tick one of the boxes below to show your answer.</p> <p>Independent groups design <input checked="" type="checkbox"/></p> <p>Repeated measures design <input type="checkbox"/></p>	1 x AO2	If both boxes ticked, no credit.
15				<p>Give one variable that the psychologists in Source C would want to control between the two factories.</p> <p>1 mark for any feasible variable identified. Likely answers: style of management, home lives of workers, amount of space in factory, level of pollution in factory, amount of pay, holiday allowance, working hours.</p>	1 x AO1	Do not credit reference to 'noise' as this is the independent variable.
16				<p>Source C gives noise as one cause of stress. Identify one cause of stress other than noise and describe a study which investigated this cause of stress.</p> <p>Cause of stress Likely answers include: heat, crowding, architecture, pollution, stressful life events.</p> <p>Description of study Credit 1 mark for each clear and accurate feature (eg aim, method, design, procedure, sample, finding, conclusion) of a relevant study eg Anderson & Anderson's correlation of temperature & crime rates, Calhoun's study of crowding in a community of rats, Valins & Baum's comparison of different types of architecture, Rotton's study of effects of air pollution on mood, Holmes & Rahe's survey of stressful life events, Lundberg's study of crowding on</p>	1 x AO1 4 x AO1	<p>To credit aim under description of study, the aim must be more specific than just identifying the cause under investigation (if this has been given credit already).</p> <p>The conclusions to study has to make clear direction of effect to gain credit (eg credit "the hotter it is, the more stressed participants are" rather than "heat causes stress").</p>

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				<p><i>commuter train.</i></p> <p><i>Only award full marks if description is coherent and detailed.</i></p> <p><i>Only award full marks if both methodology and findings/conclusion are covered.</i></p> <p><i>If the cause identified does not match the focus of the study then credit the study and do not credit the cause identified.</i></p> <p><i>If a specific life event is identified (eg death of spouse, divorce) this can be credited as a cause, but the description of the study must go on to make specific reference to it otherwise no credit.</i></p>		
17				<p>Explain what is meant by the term 'stress'.</p> <p><i>1 mark for a brief or basic response eg "stress is a type of tension", "when you are aroused"</i></p> <p><i>2 marks for a more developed and detailed response eg "stress is a physical reaction (1) to a threatening event (1)", "stress is state of psychological (1) and physiological tension (1)"</i></p> <p><i>3 marks for a detailed, accurate and coherent response eg "stress is a state of psychological (1) and physiological tension (1) in response to a threatening event (1)"</i></p>	3 x AO1	<p>Rule of thumb:</p> <ul style="list-style-type: none"> • 1 mark for a psychological effect associated with stress, including use of term 'psychological' • 1 mark for a physiological effect associated with stress, including use of term 'physiological/physical/biological' • 1 mark for the cause of that stress. Causes to be credited if they can be explicitly linked to danger, threat or change. NB "stressful situation" is too obvious to get credit.

Question	Syllabus Ref	Expected Answer	Marks	Rationale
18		<p>Outline and evaluate one <i>psychological</i> way of measuring stress.</p> <p>Responses must focus on psychological measures (eg questionnaires, observations, diaries, experiments). 1 x AO1 mark for a brief or basic response eg “questionnaires”, “doing an observation”, “getting someone to write down about their stress levels” 2 x AO1 marks for a developed and detailed response eg “using a questionnaire (1) to ask about people’s stress levels (1)” eg “observing someone (1) after making them do a stressful task (1)” eg “setting up a stressful and non-stressful condition (1) and comparing participant’s heart rates in each one (1)” N.B. Only credit description of physiological measures in the context of a psychological method – most probably an experiment.</p> <p>1 x AO2 mark for each brief or basic evaluation point which pertains to the measure outlined eg “observations have ecological validity”, “people can lie in questionnaires”, “questionnaires do not go into enough depth” 2 x AO2 marks for a developed and detailed eg “if people know they are being assessed for stress levels (1) they respond differently than normal (1)” eg “people can lie in questionnaires (1) giving unreliable results (1)” eg “self-reports are only valid (1) if people have insight into their own stress levels (1)”</p>	<p>2 x AO1 2 x AO2</p>	<p>Do not credit the use of ‘experiment’ unless the candidate specifies what psychological measures are used in the experiment.</p> <p>Candidate does not have to specify the method but can gain credit for identifying what can be measured eg ‘level of happiness’.</p> <p>Response does not have to explicitly refer to ‘stress’ to gain full credit.</p>

Question			Syllabus Ref	Expected Answer	Marks	Rationale
<p>Source D: Memory Freud's theory of motivated forgetting states that it is possible to hold memories in the unconscious part of the mind. They are often traumatic memories from which a person is trying to protect themselves.</p> <p>These memories can be accessed at a later date through psychotherapy. However, some psychologists argue that recovered memories may have been put there by therapists.</p> <p>Researchers have shown that it possible to convince participants that they got lost in a shopping centre when they were children. In fact this event never really happened.</p>						
19	(a)			<p>From the Source;</p> <p>Identify where memories are held according to Freud's theory of motivated forgetting. 1 mark for 'unconscious (part of mind)'. Accept 'subconscious' but not 'back of mind' or similar response</p>	1 x AO2	
19	(b)			<p>Give the event that participants were convinced had taken place. 1 mark for 'being lost in a shopping mall' or similarly worded response</p>	1 x AO2	Do not credit "shopping" alone as the event.
20				<p>Motivated forgetting is one theory of forgetting.</p> <p>Describe one other theory of forgetting. Responses likely to focus on displacement, (trace) decay, interference, cue dependent forgetting (retrieval failure), shallow processing. Credit 1 mark for each clear and accurate feature of a theory, including the name of a theory (although theory does not have to be named). Only credit full marks if description is accurate and coherent.</p>	4 x AO2	<p>Do not credit causes of forgetting eg brain damage, Alzheimer's, alcohol, stress, amnesia, etc</p> <p>If description focuses on remembering rather than forgetting (eg use of cues, role of rehearsal) then award max 3 marks.</p> <p>If candidate describes a study rather than a theory, credit the relevant terms related to the theory of forgetting. Otherwise max 1</p>

Question			Syllabus Ref	Expected Answer	Marks	Rationale
				<p>Examples of 1 mark responses: <i>“displacement”, “lack of rehearsal”, “we forget things that don’t mean very much to us”</i></p> <p>Examples of 2 mark responses: <i>“Interference theory (1). There are two types: proactive and retroactive (1)”</i> <i>“When memories fade (1) over time (1).”</i></p> <p>Examples of 3 mark responses: <i>“If people do not have the right cues present (1) they will forget. This can be down to a change of context (1) or because they are in a different psychological state (1)”</i> <i>“Interference theory (1) suggests that new memories can be over-ridden by old memories (1) such as forgetting someone’s married name because you can only remember their maiden name (1)”</i></p> <p>Examples of 4 mark answers: <i>“It is possible to forget something if you don’t use it (1). For example, you may forget stuff you learnt for your GCSEs after a number of years (1) because in that time (1) it has decayed through disuse (1)”</i> <i>“Displacement. (1)The STM has a limited capacity (1) which means older information gets shunted out (1) by newer information (1).”</i></p>		mark for relevant study.

Question			Syllabus Ref	Expected Answer	Marks	Rationale
21				<p>State whether the following statements are true or false.</p> <p>Give your answer by circling either TRUE or FALSE as shown below.</p> <p style="text-align: center;"> TRUE FALSE </p> <p style="text-align: center;"> TRUE FALSE </p>	2 x AO1	
21	(a)			<p>Storage in memory is the process of recovering data.</p> <p style="text-align: center;"> TRUE FALSE </p> <p>1 mark for 'false'</p>		If candidate circles both words, with no attempt to indicate their preferred answer, then award no marks.
21	(b)			<p>Data must be encoded before it can be retrieved from memory.</p> <p style="text-align: center;"> TRUE FALSE </p> <p>1 mark for 'true'</p>		If candidate circles both words, with no attempt to indicate their preferred answer, then award no marks.
22				<p>[6 marks are available for the quality of written communication in this question.]</p> <p>Describe and evaluate Atkinson and Shiffrin's two process (multi-store) model of memory.</p> <p>1-3 AO1 marks: A basic outline of the model is offered, which may not be fully accurate. The description uses simplistic terminology.</p>	8 x AO1 4 x AO2 6 x QoWC	<p>To award in top band (AO1) , the description must give an overview of the entire model but full credit can be given for a description that starts at the STM rather than the sensory store.</p> <p>Credit description of a study where it uses relevant terms. Where study contains no terms, maximum 1 mark for an answer that</p>

Question			Syllabus Ref	Expected Answer	Marks	Rationale
				<p>4-6 AO1 marks: An satisfactory description of the model is offered, but may lack detail and/or coherency. The model should be described using appropriate terminology.</p> <p>7-8 AO1 marks: A clear and accurate description of the model is offered, with a good level of coherency and detail. The model is described using appropriate terminology.</p> <p>Credit 1 x AO1 mark for each clear and accurate feature of Atkinson & Shiffrin's model eg role of attention, role of rehearsal, more than one store, references to capacity/space, references to time/duration, references to different types of coding</p> <p>Up to 3 x AO1 marks may be awarded for a well developed description of a feature eg "the STM and LTM differ in capacity (1) with STM holding an average of 7 chunks of information (1) and LTM having an unlimited capacity (1)" eg "it suggests the memory system is made up more than one store (1) mainly the short-term and long-term memory (1) which differ in terms on the duration for which they hold information (1)"</p> <p>If the candidate offers a diagram instead of or in support of the description of the model this can be awarded up to 3 marks depending on level of detail and accuracy. However, do not double-credit details that occur in both a description and the diagram. For example, candidates may receive credit for labelling of stores and processes in the diagram, but, for example, would have to describe the differences between the stores to receive further credit. Where both diagram and description offer the same information, then credit the latter as the essay primarily requires candidate to describe so this should enable them to score a higher mark.</p>		<p>supports the two process model.</p> <p>Only credit 1 mark for naming of stores (not 1 mark for each store named).</p> <p>If candidate demonstrates the direction of information processing in description (or through diagram) then credit 1 mark.</p> <p>If the candidate offers a diagram instead of or in support of the description of the model this can be awarded up to 3 marks depending on level of detail and accuracy. However, do not double-credit details that occur in both a description and the diagram. For example, candidates may receive credit for labelling of stores and processes in the diagram, but, for example, would have to describe the differences between the stores to receive further credit.</p> <p>Where both diagram and description offer the same information, then credit the latter as the essay primarily requires candidate to describe so this should enable them to score a higher mark.</p> <p>If candidate offers a table to illustrate differences between the stores, max 3 marks for this if it is detailed and accurate.</p> <p>Credit description of storage processes but not other stages of memory (e.g. encoding, retrieval).</p> <p>For AO2, do not credit comments that are</p>

Question			Syllabus Ref	Expected Answer	Marks	Rationale
				<p>1 x AO2 mark can be awarded for each brief or basic evaluation point made about the model, or up to 4 marks can be awarded for one well elaborated evaluation point. The following examples of evaluative commentary would each be awarded full marks:</p> <p><i>“The two process model can be represented by computer hardware and software (1) and therefore be tested using Artificial Intelligence (1). However, it has still not been possible to build a system which mirrors human memory (1) suggesting the model lacks ecological validity (1).”</i></p> <p><i>“The multi-store model is too rigid (1) and therefore ignores individual differences in memory (1). It also puts too much emphasis on the role of rehearsal in memory (1) and does not really consider the importance of giving things meaning to help us remember them (1)”</i></p> <p><i>“Atkinson & Shiffrin’s model is based on experiments rather than real-life (1). It also does not account for the variation in human memory (1). It only sees STM as a passive store (1). Finally, the model cannot explain how semantic processing seems to over-ride the limitations of rehearsal (1).”</i></p> <p><i>N.B. Evidence for the two-process model (eg Murdoch) can be credited as AO1 or AO2 depending on what the candidate has already been awarded. Evidence against the model has to be credited as AO2 however.</i></p> <p><i>Plus 1-6 marks for quality of written communication, as follows:</i> <i>0 marks: no use of psychological terminology and very low literacy levels.</i> <i>1-2 marks: minimal use of psychological terminology and</i></p>		<p>too vague eg “doesn’t take into account other factors”, “it is too simplistic”, “it has been supported by research”, “it has generated further research into memory”. To gain credit these types of comments must be fully elaborated.</p>

Question			Syllabus Ref	Expected Answer	Marks	Rationale
				<p><i>poor level of literacy.</i></p> <p><i>3-4 marks: appropriate use of psychological terminology and imperfect level of literacy.</i></p> <p><i>5-6 marks: sophisticated use of psychological terminology and virtually perfect level of literacy.</i></p>		

Distribution of marks

SECTION	AO1	AO2	QoWC	TOTAL
A	12	6	0	18
B	10	8	0	18
C	10	8	0	18
D	14	6	6	26
TOTAL	46	28	6	80
PERCENT	58%	34%	8%	100%

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