

GCSE

Psychology

Unit **B542:** Studies and Applications in Psychology 2

General Certificate of Secondary Education

Mark Scheme for June 2015

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All examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the report on the examination.

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1. Annotations used in the detailed Mark Scheme (to include abbreviations and subject-specific conventions)

Annotation	Meaning
V	Tick
VG	Vague
BOD	Benefit of doubt
NBOD	No benefit of doubt
KU	Knowledge and understanding
IRRL	Significant amount of material which doesn't answer the question
EXP	Repeated/credited already
E	Evaluation
1	Banded down/cap mark
×	Cross
λ	Caret sign to show omission
?	Unclear
1	Slash

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MARK SCHEME

Qı	uestion	Answer	Marks	Guidance
1		1 mark for ticking 'colour constancy' 1 mark for ticking 'shape constancy'	[2]	For each additional box ticked over the two required subtract 1 mark.
2		 1 mark for '(Max kept) mistaking other people for Suzi (because he was expecting her to be there)' 1 mark for '(Max was so excited to see Suzi that) she looked more attractive (than normal)' 	[2]	Allow some level of rewording as long as the examples are essentially still the same. Candidate can quote the whole sentence as long as it is the only sentence offered, or the first one offered (to get credit).
3	(a)	1 mark for identifying a technique e.g. subliminal advertising, use of context, use of motivation, placement of information on screen/poster (advertising for the brain), etc	[1]	Do allow 'use of perceptual set' as a more general technique. If candidate begins to address part (b) in answer to part (a) do take this into account in assessing part (b).
3	(b)	 1 mark for a brief or basic response e.g. motivation – 'advertise a food product just before meal times', context – 'get a celebrity to advertise a product', subliminal – 'flash a message on the screen', etc 2 marks for a more developed response e.g. context – 'a pie on a small plate with just a few vegetables rather than on a large plate (1) will make the pie appear larger than it is and therefore more appealing to someone with a big appetite (1)' subliminal advertising – 'presenting an image or message on the screen for a fraction of a second so it does not reach conscious awareness (1) which means that people can be persuaded to buy something without realising they are being manipulated (1)' 	[2]	To award full marks ensure there is a clear focus on perception. If the candidate's response to (a) is blank or incorrect, it is still possible to award full marks here if it is clear which technique is being outlined. If the response to (b) does not match a technique credited in (a) then assess and award either (a) or (b) a mark – selecting the higher of the two. Please note – only credit examples if they illustrate a point that has not already been credited.

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Qı	uestion	Answer	Marks	Guidance
				Only credit psychological outcomes of the techniques (i.e. altering customer's perceptions) rather than broader behavioural outcomes associated with buying the product.
4	(a)	Height in plane	1	Also accept 'distance from horizon'
	(b)	Texture gradient	1	
	(c)	Linear perspective	1	Do not credit 'linear <i>perception</i> ' or just 'perspective'
	(d)	Relative size	1	
5		1 mark for each brief, relevant evaluative comment, or up to 3 marks for one elaborated evaluative comment, or a combination of both.	4	To award full marks, more than one way of criticising the theory needs to be included. Maximum 1 mark for reference to experience (or similar) as
		Evaluation points may focus on a newborn's perception in the absence of experience, why we fall for the same illusions again and again, universialities in perception despite individual experiences, contrasts with bottom up processing and other nativist ideas such as role of instinct, etc		part of a criticism. However, it is permissible to continue crediting other examples that challenge the theory even when they pertain to the role of experience.
6	(a)	1 mark for reference to 'all over the world'	1	
	(b)	1 mark for reference to 'fixed by age'	1	

Qı	uestion	Answer	Marks	Guidance
7		 mark for a brief or basic criticism <u>For 'universal stages'</u> e.g. 'culturally biased', 'ignores individual differences' <u>For 'invariant stages'</u> e.g. 'ignores individual differences', 'does not allow children to operate on many stages at the same time' 	2 x 2	If a response is generic (could apply to both universal and invariant stages) it is still permissible to award full marks. However, if the criticism applies to the feature not chosen, maximum of 1 mark. Do not credit the idea that stages can be skipped or that children can go through them in a different order.
		2 marks for a more developed and detailed response <u>For 'universal stages'</u> e.g. 'the theory is culturally biased (1) because it emphasises western ways of thinking (1)', 'it ignores the influence of culture on cognitive development (1) for example, Aboriginal children have been shown to enter the concrete operational stage earlier than children from most other cultures (1)', 'it only sees cognitive development as a process of maturation (1) and underplays the effect of the environment (1)' <u>For 'invariant stages'</u> e.g. 'children may not develop in set stages (1) and therefore it ignores individual differences (1)', 'children may flip between different stages (1) for example, thinking egocentrically one moment and showing empathy in the next (1)', 'it only sees cognitive development as a process of maturation (1) and underplays the effect of the environment (1)'		Do not credit criticisms (or parts of criticisms) that suggest atypical development challenges Piaget's theory (e.g. development of autistic children) as it is only supposed to be an explanation of typical cognitive development.
8	(a)	1 mark for each general or specific statement about a feature of the stage which must reference cognition e.g. 'children understand the world as far as they can sense it', 'infants know an object still exists even when not seen/sensed', 'babies recognise themselves in a mirror', 'children know how far to reach to get an object'	2	Do not simply credit naming of features e.g. object permanence, body schemas. Do not simply credit age or timing of stages. Focus should be on what children develop or can do by the end of the stage rather what they cannot do.

Qı	uestion	Answer	Marks	Guidance
8	(b)	1 mark for each general or specific statement about a feature of the stage which must reference cognition e.g. 'children solve problems using abstract ideas in the absence of concrete objects', 'children understand an issue from many perspectives', 'children are aware of laws of cause and effect', 'children can make predictions about the future events'	2	If the candidate names two or more features (rather than outlines) award a maximum of 1 mark e.g. hypothetical thinking, abstract thinking, scientific/logical thinking. The additional mark would require an outline of another feature again. Do not credit features that would have developed in an earlier stage e.g. conservation, reversibility in thinking
9		 The alternative theory is likely to be Vygotsky (and is reflected in the examples below) but credit other valid alternatives e.g. Bruner. 1 mark for each key feature of Vygotsky's theory e.g. role of others, cultural tools, scaffolding, zone of proximal development, child as apprentice. All 3 marks can be awarded for the description of one feature if it is well explained. e.g. 'Vygotsky argued that each child had a zone of proximal development (1) which described the gap between where a child is at in their development and where they could be (1) with the guidance of significant others who could provide a scaffold for their learning (1)' 	3	Only award marks where there is some coherency between different features i.e. do not credit 3 marks for a list of features. Only credit what Vygotsky believed in (as opposed to what he questioned) – comparison with Piaget (e.g. apprentices vs scientists) does not earn any additional marks.
10		1 mark for each correctly placed term as shown below; "Piaget tested the <i>conservation</i> of number by using rows of counters. When he stretched out a row of counters, children in the <i>pre</i> operational stage thought there were more counters in the row. However, children in the <i>concrete</i> operational stage knew that the properties of the row could not change."	3	

Question	Answer	Marks	Guidance
11	1 mark for a brief but accurate limitation e.g. 'it lacked ecological validity', 'the sample was not representative', 'children may have been thrown by being asked the same question twice', 'young children did better at the conservation task when a teddy was used to change the rows instead'	1	Be careful not to credit descriptions of the study e.g. 'he used a small sample', 'he asked the same question twice', ' he used a laboratory experiment'
12	Award based on any two of the following three:	2	Be careful not to credit references to reproduction.
	 1 mark for a reference to instinct/nature or similar. 1 mark for a reference to the 'fight' function (e.g. signalling aggression, threatening gestures) with some context (e.g. clenching fists, baring teeth) 		As long as candidates go beyond the concept of 'non- verbal communication' this counts as context e.g. do credit when candidate refers to gestures/facial expressions/body language in the absence of anything more specific.
	1 mark for a reference to the 'flight' function (e.g. signs of appeasement, gestures that reduce threat) with some context (e.g. avoiding eye contact, showing palms).		

Question	Answer	Marks	Guidance
13	1 mark for each correctly matched box as shown below; To watch how a role model is behaving. To copy the behaviour of a role model. Reinforcement Punishment To strengthen a behaviour through reward.	3	For each additional line drawn beyond the three required subtract 1 mark.
14	 1 mark for an implied difference between cultures e.g. 'in Brazil the ok symbol is offensive', 'people are more likely to greet each other with a kiss in France' 2 marks for an explicit difference between cultures e.g. 'in the UK making a circle with thumb and index finger means everything is alright (1) whereas in parts of southern Europe it is considered a rude gesture (1)', 'in several Asian cultures, people beckon others by making a scratching motion with all four fingers (1) but in Japan it is done by raising the palm to head height' The variation can be in terms of one expression/gesture having a different meaning in different cultures, or in terms of how the same message is conveyed in a different way (non- verbally) across two cultures. 	2	To earn credit, there has to be an example of an expression/gesture. Where the difference is implied, do check that the example is not too obviously universal e.g. in the UK, we smile to show we are happy. Be careful not to credit a gesture without its meaning.

Question	Answer	Marks	Guidance
15	Up to 2 marks for each limitation. 1 mark for a brief or basic limitation e.g. 'findings are based on emoticons which are artificial', 'findings only represent students', 'findings used a number scale to interpret complex facial expressions', 'lacks construct validity', 'age-biased' 2 marks for a more developed and detailed limitation e.g. 'the findings lacked ecological validity (1) because emoticons are artificial (1)', 'findings are artificial as photographs were used (1) but we would normally be interpreting the expressions of 3D, animated faces', 'the results lacked construct validity (1) as interpretation of facial expressions was measured in a narrow way using a rating scale (1)'	4	Do assess the response holistically e.g. the two limitations may overlap and can be linked for full marks. However, do not credit more than 2 marks for any one limitation. To earn both marks for each point, the limitation must be developed in the context of the study. Generic limitations earn a maximum of 1 mark each. Candidates can be credited for evaluating the Yuki <i>et al</i> experiment that used photographs of faces. Do not credit a response that suggests the study was culturally biased/does not represent all cultures. However, it is permissible to credit sample bias with reference to age or the educational background of the participants. Do not credit reference to ethics as these do not pertain to the findings.
16	Maximum of 1 mark for identifying a way in which research can be applied in real life – this may be in terms of an area (e.g. customer services), a specific outcome (e.g. training teachers how to deal with conflict), a general technique (e.g. social skills training) or a specific technique (e.g. mirroring body language when trying to influence someone). Up to 3 marks for a description/explanation of this way of applying research. e.g. 'Social skills training can be used to help rehabilitate offenders by teaching them how to reduce aggressive displays and to increase use of appeasement gestures to avoid future conflicts (1). This may be done using techniques such as modelling appropriate non- aggressive non-verbal communication (1) and then get clients to role play (1) with	4	 The question allows candidates to explain more than one way, but to gain full credit 3 marks must be for further elaboration of any ways listed. Where social skills training is used, a maximum of 1 mark for just listing the key features without outlining them. To award full marks, the response must be in the context of learning non-verbal behaviours. Be careful not to award full marks when other behaviours are referenced e.g. verbal behaviour. Do not credit irrelevant examples e.g. teaching sign language, behaviour therapy.

Question	Answer	Marks	Guidance
	positive feedback being used to encourage non-aggressive responses (1).'		
17	1 mark for each relevant facial feature (excluding low forehead) e.g. crooked nose, glassy eyes, square jaw, protruding ears, asymmetrical face, etc	2	Only credit facial features with an adjective. Do not credit references to hair, scars, face jewellery, etc
18	 1 mark for a brief response e.g. 'crimes go unreported', 'crime figures count crimes rather than criminals', 'measures are affected by time' 2 marks for a more developed response e.g. 'crimes go unreported (1) because victims may be ashamed (1)', 'fear of retribution (1) stops people reporting crimes (1)', 'crime figures count crimes rather than criminals (1) so a gang rape would only count as one crime despite there being a number of perpetrators (1)', 'measurements are affected by cultural definitions of crime (1) making comparisons across countries difficult' 3 marks for an elaborated response e.g. 'official crime figures are generally thought to be unreliable (1) and are often seen as the 'tip of the iceberg' (1) because there is a dark figure of unreported crime that lies beneath the surface (1)', 'crimes go unreported (1) because people are too scared (1) or may be too embarrassed to come forward (1)', 'crimes go unreported (1) such as a woman who does not want to report her husband for domestic violence (1)' 	3	With the effects of culture and time, only credit elaboration where it relates to the challenges of measuring crime (as opposed to defining crime). If more than one difficulty offered, first one must be credited here.

Question	Answer		Guidance
19	A maximum of 1 mark for demonstrating an understanding of brain dysfunction e.g. 'criminal brains are different from normal', 'this is when the brain is not working properly', 'an area is underactive/overactive' A maximum of 1 mark for reason(s) for brain dysfunction e.g. genetics, accident, disease A maximum of 1 mark for naming one (or more) relevant areas of the brain e.g. limbic system, corpus callosum A maximum of 1 mark for outlining the normal function of any relevant part of the brain e.g. controls sexual/aggressive urges (limbic system), controls emotional response (e.g. amygdala) Further marks for making a link between areas of the brain and specific crimes or behaviours associated with crime e.g. rape (limbic system), impulsive acts (corpus callosum), lack of remorse (amygdala), not associating fear with committing a crime (pre-frontal cortex)	4	There must be some level of coherency, accuracy and detail to award full marks
20	The most likely study to be offered is Mednick et al (as reflected in example below) but do credit other relevant studies e.g. other adoption studies, twin studies, family history studies – however the focus must be on genetics rather than biology more generally. Up to four AO1 marks for features of Mednick et al's study, such as method (adoption study), data (criminal records), sample (14000 Danish men), procedure (comparing adoptees with biological & adoptive parents), findings (highest crime rates occurred in adoptees with both adoptive and biological parents with criminal records, adoptees had more chance of committing a crime if biological parent had criminal record compared to adoptive parent having one), conclusion (there is evidence for the heritability of criminal behaviour)	6	 Only credit sample where there are two accurate features of the sample offered. Credit results where the pattern is correct (it is not necessary to focus on the accuracy of quantitative data where it is offered). It is important that candidate shows genes over-ride environment (in the case of Mednick et al). 5–6 marks: There is a detailed description of the key features of the study, covering both procedure and findings. This should be done with accuracy and coherency. Evaluation should be present but can be brief as long as clear. Quality of written communication is at least good, and uses psychological terms. The spelling, punctuation and grammar is largely accurate. Meaning is communicated clearly.

Question	Answer	Marks	Guidance
	 For full AO1 marks to be awarded both procedure and findings must be covered. Up to two AO2 marks for evaluation points such as: gender bias, cultural bias, unreliable records, lack of matching of crimes One evaluation point can be awarded both AO2 marks as long as it is developed in the context of the study e.g. the study is gender biased (1) as women may be prone to committing different types of crimes which show a weaker genetic link (1)' 		 3-4 marks: There is description of some key features of the study. This should be done with some accuracy. Evaluation may be present but can be simple and/or brief. Quality of written communication is at least satisfactory, using some psychological terms. There are few errors in spelling, punctuation and grammar. Meaning is communicated. 1-2 marks: There is a brief reference to one or more features of the study. Description may be basic or vague. Evaluation may be present but will be simple and/or brief. Quality of written communication can be basic, using few if any psychological terms. There can be some errors in spelling, punctuation and grammar. 0 marks: No and irrelevant answer.
21	1 mark for each brief or basic statement relating to the procedure e.g. sample of 130 American pre-adolescent children, matching of family background, measures (e.g. attachment to pet, self concept, autonomy etc), use of questionnaire (as part of interview), use of rating scales,	3	It is appropriate to receive full marks even if description of procedure is incomplete (given the detail of the procedure and the marks available). Do not credit features given in the question i.e. use of interview, comparison of pet owners and non-pet owners. Only credit sample where there are two accurate features of the sample offered. Only credit measures (autonomy etc) where two or more are offered.

Qı	uestic	on	Answer	Marks	Guidance
22	(a)		1 mark for 'true'	1	If both 'true' and 'false' are circled, no marks.
22	(b)		1 mark for 'true'	1	If both 'true' and 'false' are circled, no marks.
22	(c)		1 mark for 'false'	1	If both 'true' and 'false' are circled, no marks.
23			 1 mark for each key feature of counselling e.g. non-directive, non-judgemental, showing empathy, being genuine, listening, reflecting, client centred, offering unconditional positive regard, reducing the gap between self concept and ideal self, etc NB If unconditional positive regard is credited then it must be explicit that it comes from the counsellor. To award full marks, the candidate must bring together different features of the process to show the overall outcome for the client e.g. to support the individual to understand their own worth, to facilitate their own progress as client knows themselves best, to allow the client to re-evaluate their ideal self on their own terms e.g. 'Counsellors should take a client- centred approach (1) ensuring they are both non-judgemental (1) and non-directive (1) during the process. This enables a their client to find their own solutions to their low self-esteem rather than them being imposed by the counsellor. (1)' 	4	 Do not credit common sense descriptions with no discernable psychological content. Do not credit processes/ideas that could pertain to most or all forms of therapies e.g. clients talk through their problems, it is a confidential process. Do not credit reference to client or outcome as this is given in the question. To award full marks, the response must demonstrate coherency, accuracy and detail. Be careful to credit features of counselling rather than humanistic theory e.g. ideal self, self concept.
24			Up to five AO1 marks for reference to concepts such as: uniqueness of individuals, free will, self concept, ideal self, the relevance of the gap between self concept and ideal self, self actualisation, unconditional positive regard, all people are essentially good, etc	10	Do not credit concepts in the context of counselling as this may overlap with the response to 23. Do not credit a definition of self esteem (as this is not part of the theory).

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