
PSYCHOLOGY

9990/11

Paper 1 Approaches, issues and debates

May/June 2018

MARK SCHEME

Maximum Mark: 60

Published

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This document consists of **11** printed pages.



Cambridge Assessment
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Generic Marking Principles

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptors for a question. Each question paper and mark scheme will also comply with these marking principles.

GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

GENERIC MARKING PRINCIPLE 2:

Marks awarded are always **whole marks** (not half marks, or other fractions).

GENERIC MARKING PRINCIPLE 3:

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

GENERIC MARKING PRINCIPLE 5:

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

GENERIC MARKING PRINCIPLE 6:

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

Question	Answer	Marks
1(a)	From the study by Yamamoto et al. (chimpanzee helping): Name <u>one</u> of the objects most frequently offered by the majority of chimpanzees as a potential tool in the first ‘Can See’ condition. 1 mark for correct answer. Stick/straw	1
1(b)	What behaviour was displayed only by the chimpanzee Ayumu in the ‘Cannot See’ condition? 1 mark for correct answer. He looked through the hole/window (that was not opaque); He peeked through the glass; He looked over the booth.	1
1(c)	Outline <u>one</u> conclusion from this study. 1 mark – partial/brief answer 2 marks – full answer The study suggests that chimpanzees can target help; when they understand the needs of another chimpanzee (2 marks); Chimpanzees will offer help to conspecifics but it must be direct (and not spontaneous) (2 marks); Chimpanzees will offer help to other chimpanzees but a visual assessment is needed/necessary (2 marks); Chimpanzees can understand what other chimpanzees want (1 mark); Targeted helping is not unique to humans (1 mark); Chimpanzees demonstrated altruistic behaviour (1 mark); Targeted helping is due to kinship (over reciprocity) (1 mark);	2

Question	Answer	Marks
2(a)	From the study by Saavedra and Silverman (button phobia): Describe how the boy in the study was diagnosed with his phobia. 1 mark per correct point made. The child and parent were interviewed (about the phobia); DSM (IV/V) was used/consulted; From this it was seen that the boy met the criteria for a specific phobia (of buttons); The symptom presentation did <i>not</i> meet the criteria for OCD.	2

Question	Answer	Marks
2(b)	Outline <u>one</u> piece of information from this study that supported the nurture side of the nature-nurture debate. 1 mark for the piece of evidence 1 mark for showing why it is nurture e.g. During an art class he reached for a bowl of buttons and his hand slipped and the bowl fell on him (1 mark) After that stressful experience he developed the fear of buttons/became fearful because of that situation/experience (1 mark) He had to have therapy to help him overcome his fear of buttons (1 mark) As he experienced this first-hand and he was learning to cope with the phobia, it is based on nurture (1 mark) He was cured using behavioural/imagery exposure which involves conditioning (1 mark) This procedure made him unlearn his phobia hence it is nurture (1 mark)	2
3	Outline <u>two</u> quantitative results about ‘imitative aggression’ from the study by Bandura et al. For each result, 1 mark for partial answer/partially correct answer, 2 marks for full answer/fully correct answer e.g. Boys who witnessed an aggressive male model had the highest imitative aggression score (of 25.8) (2 marks) Girls scored more highly on verbal aggression than boys (2 marks) Boys scored more highly on physical aggression than girls (2 marks) Children exposed to same sex model imitated them more than opposite sex model (2 marks) Girls were more verbally aggressive with a female aggressive model compared to the boys (2 marks) Both boys and girls imitated physical aggression more from male models (2 marks) Girls were more verbally aggressive (with a same sex model) (1 mark) Boys were more physically aggressive (with a same sex model) (1 mark) Boys had a higher aggression rate than girls (1 mark) Boys in the aggression model condition reproduced more acts of aggression (1 mark) Girls exposed to a non-aggressive male model showed no imitative aggression (1 mark) Both boys and girls imitated aggression more from male models (1 mark)	4

Question	Answer	Marks
4	Describe how Andrade (doodling) recruited her sample of participants and explain why she decided to recruit them in this way. Up to 3 marks for how the sample was recruited. Why can be 2 brief reasons. Recruitment, e.g. The participants were recruited from a university participant panel; They had all just completed a different study at the university (unrelated to the Andrade study); They were asked if they had 5 minutes to help with another study; She recruited using opportunity sampling. Why, e.g. It was done this way to enhance the boredom of the task; by using people who were already planning to go home; It was done to recruit participants faster/quicker than using volunteer sampling/already there to participate	4

Question	Answer	Marks
5(a)	The study by Piliavin et al. (subway Samaritans) is based on the concept of diffusion of responsibility. Describe what is meant by ‘diffusion of responsibility’. 1 mark per correct point made. An example can gain a maximum of one mark as elaboration. This is when a person is less likely to take responsibility for their actions/inactions when others are present; That is, the more people are present, the less likely a person may help someone who is in need; There is also an idea that responsibility is shared (in the group); Also, if they do decide to help then they will take more time to do so; People have the belief that ‘other people’ will help someone out if they are around; An example was seen in the Kitty Genovese case where some people believed others would help her	4

Question	Answer	Marks
5(b)	Outline how <u>one</u> result from this study does <u>not</u> support the concept of diffusion of responsibility. 1 mark for the result 1 mark for stating how it does not support diffusion of responsibility Result, e.g. The (small) correlation between group size and helping behaviour was positive (rather than negative) People in groups of seven or more were consistently faster at responding than those in groups of 3 Not supporting, e.g. The correlation should have been negative as when group size increases, helping should decrease (if diffusion of responsibility was happening) Speed of helping should <i>decrease</i> with <i>increased</i> group size (if diffusion of responsibility was happening)	2

Question	Answer	Marks
6(a)	In the study by Dement and Kleitman (sleep and dreams), participants were fitted with electrodes for the EEG (electroencephalogram). Describe the procedure after these electrodes had been fitted. 1 mark for every correct stage given. They then went to bed in a quiet (dark) room; The wires became as a single cord/ponytail (to stop entanglement); The EEG was run continuously through the night (at speeds of 3 or 6 mm per sec); At various times during the night, participants were woken up via a bell; They were woken in REM/nREM <i>or</i> they were woken 5 or 15 mins after REM began; They were tested on dream recall/ask to estimate length of time in REM; If they could recall a dream they were asked to describe it (in detail); They were allowed to go to sleep; They recorded their dreams into a tape recorder; They were sometimes asked questions by the experimenter.	5

Question	Answer	Marks
6(b)	Explain <u>one</u> reason why the procedure was standardised in this study. It would allow the study to be more easily replicated (1 mark) Therefore, it could be tested for reliability (1 mark) For example, knowing how long they had to be in REM for before being woken up means exact replication is possible (1 mark) It would increase the (internal) validity of the study (1 mark) Therefore, cause and effect are (more) likely to be seen (1 mark) For example, knowing it was whether being in REM caused dreams to be reported (or not) (1 mark) It can help to reduce extraneous/uncontrolled variables (1 mark) So that we know it is probably the IV of REM sleep status (1 mark) causing the change in dream activity/content – the DV (1 mark)	3

Question	Answer	Marks
7(a)	Describe <u>one</u> assumption of the cognitive approach. 2 marks – full answer 1 mark – partial answer e.g. Behaviour and emotions can be explained in terms of the role of thinking processes like attention, memory and language (2 marks); People process information like a computer in terms of input-process-output (2 marks); Behaviour can be explained via processes like memory/language (1 mark); We all follow the same information processing pathway(s) (1 mark).	2

Question	Answer	Marks
7(b)	Studies from the cognitive approach can be used to help people understand a mental health issue. Describe how the results of the study by Baron-Cohen et al. (eyes test) can help with understanding and/or treating autism. 2 marks for aspects of results that are useful 2 marks for helping to understand/treat autism e.g. (4 marks: 2 for each combination below) The AS/HFA scored significantly lower on the ‘Eyes Test’ compared to the other (three) groups; This means that this group may lack a Theory of Mind which can form part of the AS/HFA mental health issue The AS/HFA group scored significantly higher on the AQ compared to the other (two) groups; Therefore, giving people the AQ test may help us to diagnose someone with AS/HFA Useful to understand how people with autism might be perceived (e.g. as insensitive) = 1 mark. Tells us the exact issue with reading emotions = 1 mark Identifies their difficulties in recognising and understanding emotions = 1 mark Significant difference between normal people and people with autism on Eyes Test = 1 mark Negative correlation between the AQ score and the Eyes Test score = 1 mark The Eyes Test could help to define the level of autistic traits a person has = 1 mark	4
7(c)	Outline <u>one</u> other real-world application based on the results or conclusions from the study by Baron-Cohen et al. 1 mark – partial answer or no indication of who will benefit 2 marks – full answer which includes who will benefit e.g. As the AS/HFA group scored significantly lower on the Eyes Test indicating they lack a Theory of Mind, educators can help out these students by giving them extra support (e.g. through extra classes) to help improve their Theory of Mind skills in a safe environment (2 marks) The results are useful to help workers with autism to socialise by supporting them at work (1 mark)	2

Question	Answer	Marks
8(a)	Before ‘drawing lots’ to decide who became the teacher and who became the learner, Milgram (obedience) told the participants about the effects of punishment on learning. Describe what the participants were told. 1 mark per correct point made. We know <i>very little</i> about the effects of punishment on learning (OWTTE); This is because almost no scientific studies have been conducted (on human beings); We don’t know how much punishment is best for learning/whether it is beneficial to learning; We also don’t know how much difference it makes as to who is giving the punishment; So in this study we are bringing together people from different occupations (to test this out); We want to know what effect different people have on each other as teachers and learners.	4

Question	Answer	Marks
8(b)	Explain <u>one</u> similarity and <u>one</u> difference between the study by Milgram and <u>one</u> other core study from the social approach. 4 marks available for the similarity, e.g. ethics, situational, controls, quantitative data 4 marks available for the difference, e.g. species, setting, participants The other study can only be Piliavin et al. or Yamamoto et al. Level 4 (4 marks) - The candidate has explained one similarity/difference between the Milgram study and one other social study. - Accurate knowledge and understanding is applied. - There is a clear line of reasoning which is logically structured and thoroughly evaluated. Level 3 (3 marks) - The candidate has given one similarity/difference between the Milgram study and one other social study. - Knowledge and understanding is applied. - There is evidence of some structured reasoning and some evaluation. Level 2 (2 marks) - The candidate has given one similarity/difference between the Milgram study and one other social study. - Some evidence that knowledge and understanding is applied but this may be limited. - There is evidence of some reasoning with limited evaluation. Level 1 (1 mark) - The candidate has given one similarity/difference between the Milgram study and one other social study. OR - The candidate has given one point that is basic. Level 0 (0 marks) No response worthy of credit.	8

Question	Answer	Marks
9	Evaluate the study by Pepperberg (parrot learning) in terms of <u>two</u> strengths and <u>two</u> weaknesses. At least one of your evaluation points <u>must</u> be about the use of animals in psychological research. Example of evaluation in context: Experiments can make participants engage in tasks that are nothing like what could happen in real life meaning that they could lack mundane realism. In this case, Alex had been taught the concept of same/different using objects like wooden stars which are not natural objects a parrot is likely to discover in the wild. Therefore, the tasks could be said to lack mundane realism for the parrot. Other aspects that can be used for evaluation include: use of quantitative data, ethics (positive and negative), usefulness, validity of measures etc. These can be used as one strength and/or one weakness. There are other creditworthy points. Level 4 (8–10 marks) • Evaluation is comprehensive. • Answer demonstrates evidence of careful planning, organisation and selection of material. • Analysis (valid conclusions that effectively summarise issues and arguments) is evident throughout. • Answer demonstrates an excellent understanding of the material. Level 3 (6–7 marks) • Evaluation is good. • Answer demonstrates some planning and is well organised. • Analysis is often evident but may not be consistently applied. • Answer demonstrates a good understanding of the material. Level 2 (4–5 marks) • Evaluation is mostly appropriate but limited. • Answer demonstrates limited organisation or lacks clarity. • Analysis is limited. • Answer lacks consistent levels of detail and demonstrates a limited understanding of the material. Level 1 (1–3 marks) • Evaluation is basic. • Answer demonstrates little organisation. • There is little or no evidence of analysis. • Answer does not demonstrate understanding of the material. Level 0 (0 marks) No response worthy of credit.	10

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Question	Answer	Marks
1(a)	From the study by Andrade (doodling): State the aim of this study. 1 mark for the aim. To investigate whether doodling aids concentration (or not); To investigate if doodling affects the recall of places/names.	1
1(b)	How was the ‘monitoring performance score’ calculated for each participant? 1 mark for correct <i>full</i> calculation The number of correct names minus (the number of) false alarms The difference between the number of correct names and the number of false alarms	1
1(c)	Outline <u>one</u> result from the monitoring performance scores. 2 marks – full answer with comparison 1 mark – partial answer or no meaningful comparison Monitoring performance was significantly higher in the doodling condition (mean 7.7) compared to the control (non-doodling) condition (mean 6.9) (2 marks); Performance was higher/better in the doodling condition (1 mark); 15/20 recalled all (8/8) names (1 mark)	2

Question	Answer	Marks
2(a)	The study by Canli et al. (brain scans and emotions) used adult participants. Identify <u>two</u> other features of this sample. 1 mark for each correct feature Ten participants; (All) female; Right-handed; Volunteers;	2

Question	Answer	Marks
2(b)	Outline <u>one</u> methodological problem that could arise if children were used as participants in this study. 1 mark – partial answer that is methodological 2 marks – full/detailed answer that is methodological e.g. fMRI/MRI scans were used in the study to measure brain structure/activity. This requires participants to be still which might be difficult for children. (2 marks); Children may lack understanding of emotions (1 mark); Children would need to keep still during the brain scans (1 mark); Children may be scared to enter the machine so refuse to go in (1 mark); The children may find images distressing/scared of pictures (1 mark).	2

Question	Answer	Marks
3	Saavedra and Silverman studied a boy with a button phobia. Describe what happened during the behavioural exposures intervention phase of the therapy. 1 mark per correct point made. The mother provided positive reinforcement/he was rewarded for handling buttons; This was given contingent on the child successfully completing the gradual exposure; Treatment sessions lasted for 30m with the boy; Treatment sessions lasted for 20m with the boy and his mother; During one session he produced a hierarchy of disgust/fear (using a Feelings Thermometer); He was exposed to this disgust/fear hierarchy/a variety of buttons; For example, he had to hug his mother who was wearing (plastic) buttons; His level of disgust/fear was recorded; At the bottom was large denim jeans buttons/at the top was small plastic buttons.	4

Question	Answer	Marks
4(a)	Piliavin et al. (subway Samaritans) used four different model conditions. One of these was 'Critical area – early'. Outline what the model was expected to do in this condition. 1 mark per correct statement made. The model would stand in the critical area; They would wait until passing the fourth station before helping (the victim); This was approximately 70s after collapse	2

Question	Answer	Marks
4(b)	Describe <u>one</u> quantitative result of the behaviour of participants in the critical area. 2 marks for one quantitative result with a comparison 1 mark for one quantitative result without a meaningful comparison e.g. On 5% of trials with a white victim people left the critical area compared to 9% for a black victim (2 marks); Of the spontaneous helpers/first helpers, 90% were male/64% were white (1 mark) ORA In 20% of trials people moved away (from the critical area)/in total 34 people left the area (1 mark) (together = 2 marks) Males helped more than females (1 mark) 'Early' models were more likely to elicit other helpers (n=4) more than 'late' models (n=2) (2 marks)	2

Question	Answer	Marks
5(a)	The study by Yamamoto et al. (chimpanzee helping) is based on the concepts of altruism and empathy. Outline what is meant by 'altruism' and 'empathy'. 2 marks for altruism 2 marks for empathy 1 mark can be awarded for an example for <i>each</i> term <i>Altruism</i> The willingness to do certain things/doing certain things for someone else (1 mark) even if it disadvantages yourself/gain no benefit (1 mark) <i>Empathy</i> The ability to understand the emotional state of someone else (1 mark) by imagining what it would be like to be in that situation (1 mark)	4

Question	Answer	Marks
5(b)	Outline how <u>one</u> result from this study supports the concept of <u>either</u> altruism <u>or</u> empathy. 1 mark for the result 1 mark for linking to the concept Altruism, e.g. The majority of chimpanzees offered a stick or straw (correct tool) to the other chimpanzee (1 mark). This allowed the other chimpanzee to reach the juice and drink it so the chimpanzee offering the tool did not get the juice (1 mark) Empathy, e.g. The majority of chimpanzees offered a stick or straw (correct tool) to the other chimpanzee (1 mark). This could have been done as the chimpanzee offering may have imagined what it was like to be in that situation of needing a tool to solve the task (1 mark)	2

Question	Answer	Marks
6(a)	In the study by Schachter and Singer (two factors in emotion), the anger condition used a stooge and a questionnaire. Describe the procedure in the anger condition after the participants met the stooge. 1 mark per correct point made They were told by the experimenter that he would be back in 20 minutes; The stooge complains about the questionnaire with statements about it being unfair; Annoyed at being given shots [injections]; The stooge began to show anger; The questions begin with 'innocent' ones before getting more personal; The stooge 'paces' his answers to match that of the participant; The stooge makes standardised comments about various questions; The comments begin with 'innocent' comments but get increasingly hostile; He crumples up the questionnaire (at the end); (At the end) he stamps out of the room; The participants' behaviours were observed through a one-way mirror; Their behaviour was placed into categories/six categories were used. 1 mark can be given for an example of a stooge comment and 1 mark for any of the set questions asked in the questionnaire.	5

Question	Answer	Marks
6(b)	Explain <u>one</u> reason why the procedure was standardised in this study. It would allow the study to be more easily replicated (1 mark) Therefore, it could be tested for reliability (1 mark) For example having standardised prompts/behaviours for the stooge means exact replication is possible (1 mark) It would increase the (internal) validity of the study (1 mark) Therefore, cause and effect are (more) likely to be seen (1 mark) For example knowing it was ‘injection information’ causing behavioural changes (1 mark) It can help to reduce extraneous/uncontrolled variables (1 mark) So that we know it is probably the IV of information about the injection [any named one] (1 mark) causing the change in pulse rate/side effects/behaviours shown – the DV (1 mark)	3

Question	Answer	Marks
7(a)	Outline <u>one</u> assumption of the learning approach, including any example in your answer. 1 mark for the assumption 1 mark for the example e.g. We learn through observation/imitation of behaviour (1 mark). People may then copy behaviours seen on TV adverts (1 mark) <i>or</i> the children in the Bandura et al. study copied the attacks on the Bobo doll (alternative 1 mark) We learn through the consequences of our behaviour (1 mark). (Operant conditioning suggests) if we are rewarded for an action we are likely to repeat it (alternative first mark) so giving a sweet to a child after they have tidied their bedroom means they are more likely to repeat the tidying behaviour (1 mark) We learn through association (1 mark). (Classical conditioning suggests) we associate two stimuli together to produce a learned response (alternative first mark) so a cat can associate the sound of a cupboard opening with food (1 mark).	2

Question	Answer	Marks
7(b)	Studies from the learning approach have real-world applications. Describe how the results of the study by the Bandura et al. (aggression) can be applied to helping parents reduce aggressive behaviour in their children. 2 marks for the results 2 marks for applying it to the scenario e.g. Boys were much more likely to imitate the physical aggression of a same-sex model (1 mark). Therefore, parents could get their boys to witness same-sex models showing friendly behaviour (so they imitate that instead) (1 mark) Children were less likely to perform aggressive acts if they witnessed a non-aggressive model (1 mark). So, parents should only be kind in front of their children/should only let them watch pro-social TV (1 mark)	4
7(c)	Outline <u>one</u> other real-world application based on the results or conclusions from the study by Bandura et al. 1 mark – partial answer or no indication of who will benefit 2 marks – full answer which includes who will benefit e.g. As children were more likely to imitate physical/verbal aggression from a model (1 mark), TV programme makers might want to ensure that their characters are non-aggressive to reduce the amount of aggressive behaviour that is imitated (1 mark). The study showed children imitate same-sex models so it might be useful in schools (1 mark); Women can teach girls/men can teach boys to behave/learn more effectively (1 mark).	2

Question	Answer	Marks
8(a)	In the study by Pepperberg (parrot learning), the main way that Alex was trained was called the ‘model/rival technique’. Explain the procedure of this technique. 1 mark per correct feature of the procedure One human acts as a trainer/teacher to a second human; They present objects and ask questions about the objects/asked ‘What’s Same?’/asked ‘What’s Different?’ They are given praise/rewarded for correct answers (e.g. keep item); They show disapproval of incorrect answers (e.g. item taken away); The second human acts as a model for the parrot; They also act as a rival for the trainer’s attention; The parrot is allowed to participate in any verbal exchanges; Alex observed the interactions (between model and rival); The role of the M/R and trainer is (frequently) reversed.	4

Question	Answer	Marks
8(b)	Explain <u>one</u> similarity and <u>one</u> difference between the study by Pepperberg and <u>one</u> other core study from the learning approach. 4 marks available for the similarity, e.g. modelling, quantitative data, case study, ethics 4 marks available for the difference, e.g. species, sample size, type of conditioning, ethics The other study can only be Bandura et al. or Saavedra and Silverman. Level 4 (4 marks) - The candidate has explained one similarity/difference between the Pepperberg study and one other learning study. - Accurate knowledge and understanding is applied. - There is a clear line of reasoning which is logically structured and thoroughly evaluated. Level 3 (3 marks) - The candidate has given one similarity/difference between the Pepperberg study and one other learning study. - Knowledge and understanding is applied. - There is evidence of some structured reasoning and some evaluation. Level 2 (2 marks) - The candidate has given one similarity/difference between the Pepperberg study and one other learning study. - Some evidence that knowledge and understanding is applied but this may be limited. - There is evidence of some reasoning with limited evaluation. Level 1 (1 mark) - The candidate has given one similarity/difference between the Pepperberg study and one other learning study. OR - The candidate has given one evaluation point that is basic. Level 0 (0 marks) No response worthy of credit.	8

Question	Answer	Marks
9	Evaluate the study by Baron-Cohen et al. (eyes test) in terms of <u>two</u> strengths and <u>two</u> weaknesses. At least one of your evaluation points <u>must</u> be about the use of self-reports. Example of evaluation in context: The study may lack validity due to the nature of the ‘Eyes Test’. Getting people to judge emotion purely based on eyes only does not reflect how humans process emotions in everyday settings. People process the entire face plus other non-verbal and verbal cues to understand the emotions of another person. Other aspects that can be used for evaluation include: use of quantitative data, ethics (positive and negative), usefulness, reliability etc. These can be used as one strength and/or one weakness. Level 4 (8–10 marks) • Evaluation is comprehensive. • Answer demonstrates evidence of careful planning, organisation and selection of material. • Analysis (valid conclusions that effectively summarise issues and arguments) is evident throughout. • Answer demonstrates an excellent understanding of the material. Level 3 (6–7 marks) • Evaluation is good. • Answer demonstrates some planning and is well organised. • Analysis is often evident but may not be consistently applied. • Answer demonstrates a good understanding of the material. Level 2 (4–5 marks) • Evaluation is mostly appropriate but limited. • Answer demonstrates limited organisation or lacks clarity. • Analysis is limited. • Answer lacks consistent levels of detail and demonstrates a limited understanding of the material. Level 1 (1–3 marks) • Evaluation is basic. • Answer demonstrates little organisation. • There is little or no evidence of analysis. • Answer does not demonstrate understanding of the material. Level 0 (0 marks) No response worthy of credit.	10

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GENERIC MARKING PRINCIPLE 2:

Marks awarded are always **whole marks** (not half marks, or other fractions).

GENERIC MARKING PRINCIPLE 3:

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

GENERIC MARKING PRINCIPLE 5:

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

GENERIC MARKING PRINCIPLE 6:

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

Question	Answer	Marks
1(a)	From the study by Pepperberg (parrot learning): State the aim of this study. 1 mark for the correct aim. To investigate if a parrot could understand the concept of same/different	1
1(b)	Three categories were used when training Alex the parrot. The first was colour and the second was shape. What was the third category? 1 mark for the correct answer. Matter/'mah-mah'	1
1(c)	Outline <u>one</u> result about the performance of Alex the parrot from the 'probes' questions. Alex performed well above chance in this test (1 mark) Alex scored 55/61 (90.2%) accuracy on all trials (2 marks) Alex scored 49/55 (89.1%) on first-trials only (2 marks)	2

Question	Answer	Marks
2(a)	The study by Laney et al. used adult participants in Experiment 1. Identify <u>two</u> other features of this sample. 1 mark per feature 128 participants undergraduates (all) from University of California Mostly (77%) female/males and females Mean age of around 20/21 years	2
2(b)	Outline <u>one</u> methodological problem that could arise if children were used as participants in this study. 1 mark – partial answer that is methodological 2 marks – full/detailed answer that is methodological <i>and</i> linked to study e.g. The questionnaires used (potentially) had terminology on that a child may find difficult to comprehend, for example sautéed asparagus (2 marks) The children may find the questionnaire difficult to understand (1 mark) The aim of the study was about a childhood memory before the age of 10; this would not be possible if children were used (2 marks)	2

Question	Answer	Marks
3(a)	The study by Canli et al. (brain scans and emotions) used a procedure with participants in an fMRI (functional magnetic resonance imaging) scanner. Describe the presentation of the images in the scanner. 1 mark per correct point made. There were 96 images presented/48 foils; They were presented for around 2–3 s; They had to view them the entire time; They were presented through a mirror/projector; There was a 12–13 s gap between each image	3
3(b)	Identify <u>one</u> other control used in the scanner, other than the way the images were presented. 1 mark for the identification of an appropriate control as used in the scanner. The scans took place as the participant looked at the picture(s); Had to focus on a fixation cross; Head movement was minimised via a bite-bar;	1

Question	Answer	Marks
4	In the study by Yamamoto et al., the first test was called the ‘First “Can See” Condition’. Describe the results of the performance from both Cleo and Pan in this condition. 2 marks for Cleo 2 marks for Pan <i>Cleo</i> She offered the stick/straw more frequently than any other tool (2 marks). She offered the stick/straw more frequently. This happened on 97.4% of occasions/trials (2 marks) She offered the stick/straw more frequently (1 mark) <i>Pan</i> She offered the brush most frequently than any other tool (2 marks). She offered the brush most frequently. This happened 79.5% of occasions/trials (2 mark) She offered the brush most frequently (1 mark)	4

Question	Answer	Marks
5(a)	The study by Baron-Cohen et al. is based on the concept of ‘Theory of Mind’. Describe what is meant by ‘Theory of Mind’. 1 mark per point about Theory of Mind 1 mark can be awarded for an appropriate example or part of the procedure of a study (e.g. Eyes Test or Sally-Anne Test) that is used as an elaboration. This refers to our ability to attribute mental states to ourselves and others; These can be desires, emotions etc.; It is also about how we use this knowledge to explain the actions of other people/understand others It is also about how we use this knowledge to predict the actions of others; We use this knowledge to understand that people may have different ideas and hold different emotions to us;	4
5(b)	Outline how <u>one</u> result from this study supports the concept of ‘Theory of Mind’. 1 mark for any result that is Theory of Mind 1 mark for stating how it supports the idea of Theory of Mind e.g. most likely: The AS/HFA group had the lowest mean score of any of the groups (1 mark). This means they had the most difficulty assigning emotions/mental state to another person (as predicted by ToM) (1 mark)	2

Question	Answer	Marks
6(a)	At the start of the procedure of the study by Milgram (obedience), the participant and the stooge were apparently randomly allocated to the roles of teacher or learner. Later the paired-associate learning task began. Describe the procedure <u>between</u> these two events. 1 mark per point made. The learner was strapped to an ‘electric chair’ apparatus; The ‘electric chair’ apparatus was in a separate room; The experimenter explained that the straps were to prevent excessive movement; An electrode was attached to learner’s wrist with paste (to avoid blistering); They were told the electrode was attached to a shock generator; They were told that a shock would be painful but not cause permanent damage; The ‘teacher’/naïve participant was given a sample shock/45 volts This was always from the third button on the shock generator	5

Question	Answer	Marks
6(b)	Explain <u>one</u> reason why the procedure was standardised in the study by Milgram. It would allow the study to be more easily replicated (1 mark) Therefore, it could be tested for reliability (1 mark) For example knowing that the sample shock was 45 V means exact replication is possible (1 mark) It would increase the (internal) validity of the study (1 mark) Therefore, cause and effect are (more) likely to be seen (1 mark) For example knowing it was authority figure/prods causing obedience (levels) (1 mark)	3

Question	Answer	Marks
7(a)	Outline <u>one</u> assumption of the learning approach, including any example in your answer. 1 mark for the assumption 1 mark for the example e.g. Social Learning helps to explain changes in behaviour (1 mark). People may then copy behaviours seen on TV adverts (1 mark) <i>or</i> the children in the Bandura <i>et al.</i> study copied the attacks on the Bobo doll (alternative 1 mark). We learn through the consequences of our behaviour (1 mark). (Operant conditioning suggests) if we are rewarded for an action we are likely to repeat it (alternative first mark) so giving a sweet to a child after they have tidied their bedroom means they are more likely to repeat the tidying behaviour (1 mark) We learn through association (1 mark). (Classical conditioning suggests) we associate two stimuli together to produce a learned response (alternative first mark) so a cat can associate the sound of a cupboard opening with food (1 mark).	2

Question	Answer	Marks
7(b)	Studies from the learning approach can help with real-world applications. Describe how the results of the study by Saavedra and Silverman (button phobia) can help with understanding and/or treating phobias. 2 marks for the results 2 marks for applying it to the scenario e.g. The boy revealed that during an art class a bowl of buttons fell on him as he tried to get some (1 mark). Therefore, a therapist may need to investigate/ discover a situation when the person first came into contact with their phobic stimulus to (potentially) unearth the cause (1 mark) After just four sessions of the mother providing positive reinforcement the boy could cope with his worst button fears (1 mark). Therefore, for children with phobias having a parent involved in the therapy might bring about faster positive outcomes (1 mark)	4
7(c)	Outline <u>one</u> other real-world application based on the findings from the Saavedra and Silverman study. 1 mark – partial answer or no indication of who will benefit 2 marks – full answer which includes who will benefit e.g. The boy's disgust/fear (for buttons) was found out using a Feelings Thermometer (rated on a scale of 0–8) (1 mark). This might be useful for schools to use with students who show fear (or use it for anger) to help understand what is causing the fear (or anger) in a child at school (1 mark)	2

Question	Answer	Marks
8(a)	Describe the materials that were used in <u>both</u> the 'doodling' condition <u>and</u> the 'control' condition in the study by Andrade. 1 mark for each 'common' material noted. Mock telephone message recorded (on audio cassette); The message was at a rate of 227 words per minute; Played at a comfortable listening volume; The script had eight names of those attending the party; There were names of three people (and one cat) who could not attend; Eight place names were mentioned; A piece of paper <i>and</i> a pencil.	4

Question	Answer	Marks
8(b)	Explain <u>one</u> similarity and <u>one</u> difference between the Andrade study and <u>one</u> other core study from the cognitive approach. 4 marks available for the similarity, e.g. laboratory based, quantitative data 4 marks available for the difference, e.g. participants (sample or demographics) The other study can only be Laney et al. or Baron-Cohen et al. Level 4 (4 marks) • The candidate has explained one similarity/difference between the Andrade study and one other cognitive study. • Accurate knowledge and understanding is applied. • There is a clear line of reasoning which is logically structured and thoroughly evaluated. Level 3 (3 marks) • The candidate has given one similarity/difference between the Andrade study and one other cognitive study. • Knowledge and understanding is applied. • There is evidence of some structured reasoning and some evaluation. Level 2 (2 marks) • The candidate has given one similarity/difference between the Andrade study and one other cognitive study. • Some evidence that knowledge and understanding is applied but this may be limited. • There is evidence of some reasoning with limited evaluation. Level 1 (1 mark) • The candidate has given one similarity/difference between the Andrade study and one other cognitive study. OR • The candidate has given one point that is basic. Level 0 (0 marks) No response worthy of credit.	8

Question	Answer	Marks
9	Evaluate the Schachter and Singer study (two factors in emotion) in terms of <u>two</u> strengths and <u>two</u> weaknesses. At least <u>one</u> of your evaluation points <u>must</u> be about the use of independent measures. Example of evaluation in context: The study breaks the ethical guideline of no deception. The participants believed that they were being given a vitamin injection called Suproxin – it was in fact epinephrine. They also believed that the stooge was another real participant. Therefore, the participants were deceived at least twice in the study. Other aspects that can be used for evaluation include: use of quantitative data, ethics (positive and negative), usefulness, use of qualitative data, reliability etc. These can be used as one strength and/or one weakness. Level 4 (8–10 marks) • Evaluation is comprehensive. • Answer demonstrates evidence of careful planning, organisation and selection of material. • Analysis (valid conclusions that effectively summarise issues and arguments) is evident throughout. • Answer demonstrates an excellent understanding of the material. Level 3 (6–7 marks) • Evaluation is good. • Answer demonstrates some planning and is well organised. • Analysis is often evident but may not be consistently applied. • Answer demonstrates a good understanding of the material. Level 2 (4–5 marks) • Evaluation is mostly appropriate but limited. • Answer demonstrates limited organisation or lacks clarity. • Analysis is limited. • Answer lacks consistent levels of detail and demonstrates a limited understanding of the material. Level 1 (1–3 marks) • Evaluation is basic. • Answer demonstrates little organisation. • There is little or no evidence of analysis. • Answer does not demonstrate understanding of the material. Level 0 (0 marks) No response worthy of credit.	10