Cambridge Assessment International Education

Cambridge International AS & A Level

PSYCHOLOGY **9990/01**

Paper 1 Approaches, Issues and Debates **For examination from 2020**

MARK SCHEME

Maximum Mark: 60

Specimen

This document has **12** pages. Blank pages are indicated.

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	**State <u>one</u> aim from the study by Dement and Kleitman (sleep and dreams).** Award 1 mark for stating an aim. • to investigate the relationship between eye movements and dreaming (1) • to see if more dreaming happens during REM sleep than non-REM sleep (1) • to investigate whether there is a link between the length of time in REM sleep and the length of dreaming (1) • to see if there is a relationship between the pattern of REM observed in sleep and the content of the dream discussed when awake. (1) Other appropriate responses should also be credited.	**1**

Question	Answer	Marks
2	**Identify which <u>one</u> of the following statements is <u>not</u> true of Dement and Kleitman's observations of REM sleep.** Award 1 mark for the correct statement: Eye movements are more frequent in dreams about distant objects.	**1**

Question	Answer	Marks
3(a)	**From the study by Laney et al. (false memory):** **Explain why the study was carried out.** Award 1 mark for partial explanation. Award 2 marks for full explanation. • To test whether positive false memories could be implanted (for a food) (1) and whether this would lead to increased liking (for the food). (1) • To find out whether people could be led to believe that they liked asparagus when they were young (1) and if that made them give a higher rating to a photograph of asparagus. (1) Other appropriate responses should also be credited.	**2**
3(b)	**Describe what the participants were told about the purpose of the study before it began.** Award 1 mark for each piece of information. • What tasks they would be doing e.g. filling out questionnaires/doing tests on food preferences. (1) • That it was a study about (the relationship between) food preferences and personality. (1)	**2**

Question	Answer	Marks
3(c)	**Explain why the participants were <u>not</u> told that the study was about false memories when they arrived at the laboratory.** Award 1 mark for each of the following: • for identifying the potential influence of demand characteristics • for outlining/defining what demand characteristics are (can be implicit in the answer) • for stating how this may affect the behaviour of the participant. For example: • it was used to avoid (the influence of) demand characteristics (1) • this is when some feature of a study informs the participants about the real purpose of the study/because the participants' 'memories' could be affected by knowing the aim (1) • therefore, this influences the participants' behaviour during the study independent of any experimental manipulation (reducing validity)/so the participants may try harder to recall the 'real' memories than the 'false' memories. (1) Other appropriate responses should also be credited.	**3**

Question	Answer	Marks
4(a)	**The study by Baron-Cohen et al. (eyes test) used adult participants, although similar studies have used children.** **Describe <u>one methodological</u> problem that could arise if child participants were used in this study.** Award 1 mark for identifying a problem. Award 1 mark for why this is a problem and/or consequences for the results. For example: • children might not understand the words (1) so they wouldn't be able to choose words correctly for the emotions, even if they had a glossary (this might not help) (1) • so the results would be invalid (1) because the children might understand the emotions, just not be able to choose the words to describe them. (1) Other appropriate responses should also be credited.	**2**

Question	Answer	Marks
4(b)	**Explain <u>one</u> useful application of the findings, if child participants were used in this study.** Award 1 mark for identifying a suitable application. Award 1 mark for explaining this application. Explanation can include either how it could be applied or why it would be useful. Candidates may also recognise problems with their suggested application. For example: • eyes test could be used to detect autism in early childhood (1) because this may enable early treatment/therapy/to help parents, although it is not intended as a diagnostic tool (so this might not work) (1) • the Autism Spectrum Quotient could be developed to ask child-friendly questions to detect autism early (1) so this would enable early treatment/ therapy/to help parents. (1) Other appropriate responses should also be credited.	**2**

Question	Answer	Marks
5(a)	**Describe the conclusions from the study by Bandura et al. (aggression).** Award 1 mark for each correct answer up to a maximum of 3. **Three** from: • watching a model can produce aggression in the observer • boys are more likely to copy same gender models • boys are more likely to copy physically aggressive behaviour than girls • girls are slightly more likely to copy verbally aggressive behaviour than boys • aggression from male models is more likely to be copied than aggression from female models. Other appropriate responses, including elaboration, should also be credited.	**3**

Question	Answer	Marks
5(b)	**Explain <u>two</u> ways in which the learning approach is different from the social approach. Use the study by Bandura et al. as an example of the learning approach.** For each way: Award 1 mark for identifying an aspect of the learning approach as exemplified by Bandura. Award 1 mark for explaining how this is different in the social approach. For example: • the learning approach focuses on the acquisition of behaviours, for example, in Bandura et al. the acquisition of (specific) aggressive responses (1) whereas the social approach focuses on behaviours that are a product of the social situation (1) • the learning approach typically uses rigorous laboratory experiments, for example, in Bandura et al. a controlled environment with adult models showing pre-decided behaviours and being observed through a one-way mirror (1) whereas the social approach often studies behaviour in context, i.e. observes social situations/uses field studies (1) • the learning approach focuses on studying individuals, for example, Bandura et al. observed each child individually (following their opportunity to observe the adult model) (1) whereas the social approach focuses on the interactions between individuals. (1) Other appropriate responses should also be credited.	**4**

Question	Answer	Marks
6(a)	**Describe <u>one</u> aim from the study by Saavedra and Silverman (button phobia).** Award 1 mark for identifying a suitable aim. Award 1 further mark for elaboration of the aim. For example: • to study what caused button phobia in a young boy (1) • to investigate the (understudied) ideas of disgust and evaluative learning (1) in a child (rather than in adults) (1) • to treat the boy's button phobia (1) by reducing disgust/fear responses. (1) Other appropriate responses should also be credited.	**2**

Question	Answer	Marks
6(b)	**Explain how <u>two</u> results from the study by Saavedra and Silverman relate to the aim you have described in part (a).** Award 1 mark for identifying a result. Award 1 mark for an explanation linking to the aim in part **(a)**. • buttons from a bowl fell on the boy (1) which was very distressing, e.g. embarrassing in front of the class (1) • the boy was able to avoid buttons over a long period of time (four years) (1) which reinforced his fear (1) • *in vivo* exposure tasks were achieved by session four (1) but the boy's distress levels were higher than when the tasks started (1) • after the *in vivo* exposure tasks, the boy's ratings of distress increased instead of decreased (1) which was consistent with evaluative learning (1) • imagery sessions helped to reduce disgust of buttons (1) and this reduced the boy's level of distress (1) • cognitive re-structuring helped the boy make progress from larger to smaller buttons (1) and after further treatment he could wear buttons (1) • when the treatment changed from behavioural exposure tasks to imagery sessions (1) the boy's phobia of buttons reduced and then eventually stopped. (1) Other appropriate responses should also be credited.	**4**

Question	Answer	Marks
7	**Studies in cognitive psychology could be used to help workers doing repetitive jobs who find it hard to concentrate.** **Describe how the results of the study by Andrade (doodling) could be applied to help with this problem.** Award 2 marks for describing the results of Andrade's study. Award 2 marks for applying the results described to one of the situations given. **Results** • Memory for names by doodlers (5.1) better than controls (4). (1) • Memory for places by doodlers (2.4) better than controls (1.8). (1) • In each case, the difference was significant. (1) **Application** • If they can doodle while doing their job they will concentrate better. (1) • So they will be able to notice and remember things they have to do better when they doodle. (1) Other appropriate responses should also be credited.	**4**

Question	Answer	Marks
8	**According to Milgram, his study on obedience produced <u>two</u> surprising findings.** **Describe <u>both</u> of these surprising findings.** For each finding: Award 1 mark for identification of the finding. Award 1 mark for the description. For example: • strength of obedient tendencies: 26/40 participants followed instructions to hurt another person (1), e.g. disregarding learned moral conduct, even though they had no special powers to enforce his commands, and disobedience would bring no material loss, i.e. showed Germans were not different (1) • emotional strain (against what their conscience dictates) (1), e.g. twitching, stuttering, pulling earlobe, twisted hands, pushed his head into his hands, muttered 'Oh God, let's stop it', i.e. showed Germans were not different. (1) Other appropriate responses should also be credited.	**4**

Question	Answer	Marks
9	**The study by Canli et al. used a brain scan.** **Explain why brain scans are used in the biological approach to psychology. Use an example in your answer.** Award 1 mark for correct reason for using brain scans in the biological approach. Award 2–3 marks for correct reason with relevant example (from Canli et al. or other biological approach study). Award 4 marks for correct reason with elaboration and an example. For example: • because the biological approach studies the role of neurons/the brain (1) and how they control/affect emotion/behaviour/cognition (1), and CAT/MRI scans tell us about brain **structures**. (1) For example, their size in different people/how they change with age/when they are damaged (1) • brain scans can tell us about what different areas might do (1) and PET/fMRI scans tell us about brain **activity**. (1) For example, how it is linked to perceptions or actions (1), the focus of the scan on amygdala in Canli et al. was used with participants who were awake/actively engaged in a task/rated emotionality to visual scenes which showed scan activity was related to a cognitive variable/memory (1) • it is an objective/reliable technique typical of the scientific stance of the biological approach (1) and allows for controls to be imposed (1). For example, the control in Canli et al. was neutral images (1). These would be rapid when the patient was dreaming, by watching the eyes, they would move rapidly when the patient was dreaming. (1) Other appropriate responses should also be credited.	**4**

Question	Answer	Marks
10(a)	**From the study by Piliavin et al. (subway Samaritans):** **Outline <u>two</u> aims of the study.** For each: Award 1 mark for a brief aim. Award 2 marks for a clear, detailed aim. For example: • to investigate helping behaviour (1) • to see if people help others on a train/subway (1) • to see if people help drunk victims (1) • they wanted to study bystander behaviour outside the laboratory, in a realistic setting where participants would have a clear view of the victim (2) • they wanted to see whether helping behaviour was affected by the victim's responsibility for being in a situation where they needed help (2) • they wanted to see whether helping behaviour was affected by the race of the victim (2) • they wanted to see whether helping behaviour was affected by the modelling of helping behaviour (2) • they wanted to see whether helping behaviour was affected by the size of the group. (2) Other appropriate responses should also be credited.	**4**

Question	Answer	Marks
10(b)	**Discuss at least <u>two</u> strengths and <u>two</u> weaknesses of the study.** Answers could include: **Strengths** • The setting was a subway train which is not artificial (a real situation). People can find themselves in this situation daily, so the study does have ecological validity. • As the setting is on a train and therefore natural and no one was aware that the whole situation was staged, there was very little chance that anyone would have shown behaviour to fit the aim of the study. Therefore, the behaviour shown by the participants was natural and therefore valid/reduced demand characteristics. • The data collection included both qualitative and quantitative data, so was informative about how much helping there was (or wasn't) and why. **Weaknesses** • The positioning of people in the carriages could not be controlled (this is just one example). Therefore, they may not have noticed the incident or ignored it as they were reading etc., so it may not have been the type of victim affecting helping levels. • The participants in the train did not know it was a study so were deceived and obviously informed consent could not be taken from them prior to the collapse. This goes against ethical guidelines. • Participants may have been distressed by the events on the train, which goes against the guideline of protecting participants from harm. Other appropriate responses should also be credited. Mark according to the levels of response criteria below: **Level 4 (7–8 marks)** • The candidate has discussed at least two strengths **and** two weaknesses of the Piliavin et al. study. • Accurate knowledge and understanding is applied. • There is a clear line of reasoning which is logically structured and thoroughly evaluated. **Level 3 (5–6 marks)** • The candidate has given at least one strength **and** at least one weakness of the Piliavin et al. study. • Knowledge and understanding is applied. • There is evidence of some structured reasoning and some evaluation. **Level 2 (3–4 marks)** • The candidate has given one of the required strengths **or** weaknesses of the Piliavin et al. study. • Some evidence that knowledge and understanding is applied but this may be limited. • There is evidence of some reasoning with limited evaluation.	**8**

Question	Answer	Marks
10(b)	**Level 1 (1–2 marks)** • The candidate has given one basic strength **or** weakness that is in the context of the Piliavin et al. study **OR** • The candidate has given two evaluation points that are basic. **Level 0 (0 marks)** No response worthy of credit.	

Question	Answer	Marks
11	**Evaluate the study by Schachter and Singer (two factors in emotion).** Answers could include: • tested the two factor theory, looking at physiological and psychological components of emotion • used a stooge to manipulate psychological component, happy or angry • used a questionnaire to create emotional arousal and adrenalin to create physical arousal • measured responses by how much the participant joined in with the stooge • found that both factors were important • the physiological factors were interpreted differently depending on the psychological component from the stooge's behaviour • it isn't ethical because the participants were annoyed by the stooge/ deceived by the injection etc. although this gives it good validity because the participants were unaware of the intention to manipulate their mood • it has good generalisability because the sample was large (184 participants) • but all the participants were male, reducing generalisability as females' emotions may have been different • there may have been issues with standardisation between participants as the response of each person to the stooge would have been different, meaning that the stooge's behaviour can't have been identical. Other appropriate responses should also be credited. Mark according to the levels of response criteria below: **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.	**10**

Question	Answer	Marks
11	**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. Evaluation can include, for example: validity, reliability, generalisability, comparisons to other studies or approaches. Other appropriate responses should also be credited.	