UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

GCE Advanced Subsidiary Level and GCE Advanced Level

MARK SCHEME for the May/June 2012 question paper

for the guidance of teachers

9698 PSYCHOLOGY

9698/13 Paper 1 (Core Studies 1), maximum raw mark 80

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

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Section A (60 marks)

Answer **all** questions in this section.

1 Describe <u>two</u> behaviours recorded by observers from the videotapes of suspects in the study by Mann et al (lying). [4]

8 are given in the paper.

Gaze aversion: number of seconds for which the participant looked away from the interviewer
Blinking: frequency of eye blinks NB: blink more / blink less = 2 marks (as indicate that frequency was measured)
Head movements: frequency of head nods (upward and downward movement was counted as a separate nod), head shakes (similar to head nods, each sideways movement was counted as a separate shake) and other head movements that were not included as head shakes or head nods (eg tilting the head to the side, turning the face etc.)
Self-manipulations: frequency of scratching of the head, wrists etc. (touching the hands was counted as hand/finger movements rather than self-manipulations)
Illustrators: frequency of arm and hand movements which were designed to modify and/or supplement what was being said verbally
Hand/finger movements: any other movements of the hands or fingers without moving the arms
Speech disturbances: (they were scored on the basis of typed verbatim text) frequency of saying "ah" or "mmm" etc. between words, frequency of word and/or sentence repetition, sentence change, sentence incompletion, stutters etc.
Pauses: Number of seconds where there is a noticeable pause in the monologue of the participant, when the suspect actually stops between words for a period of approx 0.5s or more, stopping the free-flow of conversation for a period of time whilst the suspect thinks of the next word.

1 mark for name of category, one for description (does not have to be in full) X2

2 From the study by Loftus and Pickrell (false memories):

	recall				clarity	
	True		False		True	False
	%	/72	%	/24		
booklet	68	49	29	7		
interview 1	68	49	29	6	6.3	2.8
interview 2	68	49	25	6	6.3	3.6

(a) Describe the results for the recall and clarity of true events. [2]

49/72 = 68% events recalled
Mean clarity rating 6.3

1 mark for recall, 1 mark for clarity

'both higher for true than false' (1 mark)

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(b) Describe the results for the recall and clarity of <u>false</u> events. [2]

Accept either interview 1 or 2 data

7/24 = 29% events recalled (interview 1) / 6/24 = 25% events recalled (interview 2)
Mean clarity rating 2.8 (interview 1) / Mean clarity rating 3.6 (interview 2)

1 mark for recall, 1 mark for clarity.

'both lower for false than true' (1 mark)

NB: some candidates are also using:
'mean words recalled', which is fine as an illustration of recall (True = 138, i.e. 'more' than False = 49.9)
75% rejected suggestion (okay for recall of false)

3 Baron-Cohen et al say that the Eyes Test only involves the first and not the second stage in the attribution of theory of mind. Describe both of these stages. [4]

Stage 1: *attribution*
of relevant mental state (e.g. compassion)

Stage 2: *inferring / inference*
of content of that mental state (e.g. compassion for her mother's loss)

1 mark for naming stage, 1 mark for describing x 2

NB: responding is the second stage of ToM, not of attribution, so is incorrect for (b), but may be part of the answer for (a)

4 Held and Hein (kitten carousel) used three main tests to assess visual-spatial discrimination. They also did several additional tests to check the status of peripheral receptors and responses. Describe two of these additional tests. [4]

"the S, held in a standing position in a neckyoke and body clamp was light-adapted in the normally illuminated lab prior to observation…"
visual pursuit of a moving object: elicited by E's hand moving slowly across S's visual field.
pupillary reflex to light: change in pupillary size was then noted when a beam of light from a penlight was moved across the eye from outer to inner canthus [=corner of the eye]
tactual placing response: the S's body was held in E's hands so that its head and forelegs were free [as in the visual paw-placing test]. It was then carried to the edge of the table where the dorsa [tops/backs] of its front paws were brought into contact with the **<u>vertical</u>** surface of the table [and compared to the response of normals, which place the paws on the horizontal surface].

1 mark for naming / identifying test, 1 mark for describing x 2

NB:
Pupils constrict / contract / get smaller to light. They do not dilate.
The **incorrect** tests are:

- visually guided paw placement to a horizontal surface
- visual cliff
- blink to an approaching object

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5 In Milgram's study on obedience he says that we learn in childhood that it is a 'breach of moral conduct to hurt another person'.

(a) To what extent did Milgram's participants follow the moral conduct they had learned?[2]

1 mark partial: They didn't / They followed orders *to hurt someone else.*
2 marks: plus any evidence (eg 'all went to 300V', '26/40 went to max')

Alternative answers:
"they did" = 1
then *either* 'they followed orders'
or 'they refused to give shocks (at some point, so the prods were needed)'

(a good answer can still earn 2 this way)

(b) What did Milgram conclude? [2]

Most likely:
People will follow orders
even when this means they hurt another person
even when they won't be punished
even though this causes them distress

Any conclusion acceptable, does not have to link to part (a).

1 mark partial, 2 marks full

6 The study by Haney, Banks and Zimbardo was stopped early because of the negative effects of pathological prisoner syndrome. Describe two factors contributing to pathological prisoner syndrome. [4]

Most likely (pp 94, 95-6 also p89):
perceived loss of identity
- name
- dress etc

arbitrary control of lives
- invasion of privacy
- constant surveillance
- atmosphere of oppression

dependency/emasculation
- requirement for permission
- belittling / punishment

Also:
- learned helplessness
- insulting
- threatening
- humiliating
- dehumanising
- "adopting attitude and behaviour which sanctioned their victimisation"

1 mark partial (statement of factor or example/description which identifies a factor), 2 marks full (description of factor) x 2

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7 From the study by Piliavin et al (subway Samaritans):

(a) Identify <u>one</u> independent variable that was manipulated by the experimenters. [2]

IVs: type of victim (drunk / ill)
race of victim (black / white)
model (late / early or critical / adjacent)

1 mark partial, 2 marks full

For 'full' accept either a statement of the IV and a level (eg 'type of victim, eg ill') or both levels of the IV (eg 'black / white')

(b) Identify <u>two</u> dependent variables recorded by the observers. [2]

DVs: speed of responding
frequency of responding (= "level" / "whether" / "amount" "number" …. of)
race of helper

1 mark for each DV x 2

8 Freud used the case study method to investigate little Hans.

(a) Give <u>two</u> features of this investigation that make it a case study. [2]

Most likely:
Only studied **<u>one individual</u>**
Studied **<u>in depth</u>** (*<u>or</u>* over a long period of time – do not accept this as well as 'in depth')

1 mark x 2

(b) Give <u>one</u> disadvantage of the case study method as used in this investigation. [2]

Any disadvantage related to study.

Most likely:
cannot generalise from Hans to other children; because he was unusual/only 1 child
data collected through father; potential bias as knew /related to Hans.

1 mark partial, 2 marks full

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9 Describe <u>two</u> features of the sample in study 1 from Langlois et al (infant facial preference) [2]

- 110 (reduced to 60: because of fussing/computer or equipment failure/experimenter error/mother looked at slides/1 month premature)
- infants (average age 6 months, 6 days *or* tested within 3 weeks of being 6 months old, healthy, middle class, full term)
- from Children's research lab (University of Texas (at Austin))
- 35 boys, 25 girls
- 53 white, 5 Hispanic, 1 Black, 1 Asian (any 2 for 2 marks)

1 mark for naming/identifying feature, 1 mark for describing x 2

10 Describe <u>two</u> factors affecting children's moral judgments that were investigated by Nelson. [4]

motive / outcome: eg <u>good</u> or <u>bad reason</u> for behaviour

consequence: eg <u>good</u> or <u>bad outcome</u> from action (accept: if / whether it matches the outcome)

presentation: (verbal only) / (verbal +) **<u>explicit</u>** / (verbal +) **<u>implicit</u>** (accept: 'valence', 'why he threw the ball')

1 mark for naming factor, 1 mark for describing x 2

11 Dement and Kleitman (sleep and dreaming) looked at the relationship between dream content and eye movements.

(a) Describe the dream content of one participant. [2]

most likely:
P 1: standing at bottom of cliff operating hoist and looking at climbers
P 2: climbing ladders, looking up and down
P 3: throwing basketballs at net
P 4: two people throwing tomatoes at each other
P 5: driving a car then speeding car from left

1 mark partial, 2 marks full (one point in detail or two in brief)

(b) What did Dement and Kleitman conclude about the relationship between dream content and eye movements? [2]

Most likely:
- 4 main patterns: mainly vertical, mainly horizontal, vertical and horizontal, little/no movement
- dream content linked to eye movements in sleep

1 mark partial, 2 marks full (if give 2, likely to be 2)

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12 From the study by Rosenhan (sane in insane places):

(a) What did the pseudopatients do to gain admission to the mental hospitals? [2]

- telephoned for an appointment
- on arrival claimed they could hear voices (empty, thud, hollow)

1 mark partial, 2 marks full (= 1 in detail or 2 in brief)

(b) Describe what the pseudopatients did after they had been admitted. [2]

Any 2 behaviours briefly or 1 in detail, 2 marks

- ceased simulating any symptoms of abnormality
- some showed brief signs of anxiety
- spoke ordinarily to staff and patients
- responded to instructions
- wrote observations down
- made requests, eg to know when they would be discharged

1 mark partial, 2 marks full

13 From the study by Thigpen and Cleckley (multiple personality disorder):

(a) Identify <u>two</u> tests that were used. [2]

- IQ test
- Rorschach
- memory test

(EEG is not a test)

1 mark per test identified x2

(b) Describe the results of <u>one</u> of these tests. [2]

Most likely:

- IQ: Eve white 110, Eve black 104 (EW and EB different / EW higher than EB = 1)
- Rorschach: Eve white repression, Eve black regression

1 mark partial, 2 marks full

14 From the study by Billington et al (empathising and systemising):

(a) What is meant by 'empathising'? [2]

"…the drive and ability to **<u>identify</u>** another's mental states and to **<u>respond</u>** to these with one of a range of appropriate emotions"

1 mark partial, 2 marks full

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(b) Give one piece of evidence that suggests females are better empathisers than males.[2]

Most likely from EQ:
no males were extreme empathisers some females were
36.8% of females were E or extreme E, only 10.3% of males were

EQ results: *the means are my approximations*

	EQ score mean	EQ 'Emathiser' %	EQ 'extreme E' %	Eyes test mean
females	45	35	2	34
males	38	0	0	32

From Eyes test:
females scored better on the eyes test (1 mark)

1 mark partial, 2 marks full

NB: results from EFT and FC-EFT do not earn credit

15 From the study by Veale and Riley about body dysmorphic disorder (mirror gazing):

(a) State the <u>two</u> ways in which the control participants and body dysmorphic disorder participants were matched. [2]

- age
- sex

1 mark per match identified x2

(b) Give <u>two</u> differences in activities during long sessions spent in front of the mirror between the two groups. [2]

most likely:
controls more likely to:
- remove hairs
- shave

BDD patients more likely to:
- compare what they see to image of how they 'should look'
- <u>try</u> to see something different in the mirror

2 marks for 2 differences

NB: NO difference in using make up/ combing or styling hair / picking spots / feeling skin with fingers

Must be the responses above, **<u>not</u>** things from table in motives section on p 1385

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Section B (20 marks)

Answer **both** questions in this section.

16 Discuss <u>one</u> of the studies listed below in terms of <u>two</u> weaknesses. [10]

Loftus and Pickrell (false memories)
Bandura et al (aggression)
Maguire et al (taxi drivers)

No marks for description of study.

If more than two weaknesses have been considered, mark them all and award for the best two.

Comment	mark
No answer or incorrect answer	0
Anecdotal evaluation, brief detail, minimal focus. Very limited range. Evaluation may be inaccurate, incomplete or muddled.	1-3
Either points illustrating weaknesses lack depth and/or breadth *or* only 1 weakness is considered. The answer is general rather than focused on study but shows some understanding.	4-5
Two weaknesses are considered and are focused on the study although they may be imbalanced in terms of quality and/or depth. The answer shows good evaluation with reasonable understanding.	6-7
Balance of detail between weaknesses and both are focused on the study. Evaluation is detailed with good understanding and clear expression.	8-10

Examples of possible evaluation points:

Loftus and Pickrell
- Ps may, in fact, have had similar experiences to those suggested
- The true stories (reported by the relatives) may have differed from reality, causing confusion
- Raises ethical issues as deception required

Bandura et al
- Children's apparent imitation may have been due to changes in belief about appropriate behaviours with the Bobo doll
- Raises ethical issues as (some) children encouraged to become aggressive
- As the children already had expectations about gender-role behaviour, the results cannot indicate whether any aspects of these gender differences are innate
- The situation was unlike real life because:
  - It was short-term
  - There were no negative consequences to the aggression (e.g. from peers or adults)
  - The models were strangers

Maguire et al
- Generalisations to real-world navigation from imagining routes may not be valid as memory for routes may depend on the experience of what is seen as we travel
- All the taxi drivers were male. As female navigation differs from males, the findings may not generalise to females.
- There are many factors being considered so the results are complex, and some factors are deliberately not considered, eg the role of spatiotemporal contexts of landmarks or films

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17 Discuss the advantages and disadvantages of the laboratory experiment using one of the studies listed below. [10]

Tajfel (intergroup categorisation)
Schachter and Singer (emotion)
Dematte et al (smells and faces)

No marks for description of study.

Comment	mark
No answer or incorrect answer	0
Anecdotal discussion, brief detail, minimal focus. Very limited range. Discussion may be inaccurate, incomplete or muddled.	1-3
Either points limited to illustrating advantages *or* disadvantages of lab experiments or lack of depth and/or breadth. The answer is general rather than focused on study but shows some understanding.	4-5
Both advantages or disadvantages are considered and are focused on the study although they may be imbalanced in terms of quality or quantity. The answer shows good discussion with reasonable understanding.	6-7
Balance of detail between advantages and disadvantages and both are focused on the study. Discussion is detailed with good understanding and clear expression.	8-10

Examples of possible discussion points:

Tajfel

Advantages

- Ps could be randomly allocated to groups to avoid actual reasons for discrimination
- Task could be controlled to ensure that differences in behaviour (allocation of points) were measurable
- Ps could be deceived about the aims to avoid demand characteristics e.g. boys tending to exaggerate preference for own group

Disadvantages

- Task of allocating points for guessing dots in not very realistic
- Sample very restricted (boys, 14–15, same school) so findings may not generalise to behaviour of others, eg girls more co-operative
- Deception about the aims and procedures (eg not testing vision) raises ethical issues

Schachter and Singer

Advantages

- Ps could be misled to reduce risk of demand characteristics, eg Suproxin / vision
- Possible to manipulate level of knowledge of effects and therefore explanation for bodily condition
- Possible to manipulate context to produce positive or negative valence to emotions

Disadvantages

- As injections were used, Ps may have assigned feelings to the injection in the 'suproxin' condition, so not very realistic
- The placebo condition may have had an effect (as placebos do)
- Situation of questionnaire highly contrived, unlike real life
- Sample very restricted (males, college students and same uni) so findings may not generalise to behaviour of others, e.g. females less aggressive
- All psychology students so may have had suspicions about the effects, leading to demand characteristics

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Demattè et al

Advantages

- Possible to use specialised equipment to ensure the level of odours was controlled
- Possible to use standardised faces, so attractiveness was controlled
- Order of presentation of faces could be counterbalanced to overcome order effects

Disadvantages

- A limited number of odours was used, so the findings may not generalise to real situations where there are many odours and they may be combined
- Nor may generalisations from judgments about the attractiveness of static faces extend to effects on social or sexual behaviour in the real world
- As only females were tested this study cannot indicate the effect of olfactory cues on judgments of attractiveness by males

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