Cambridge International AS & A Level

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PSYCHOLOGY **9990/42**

Paper 4 Specialist Options: Application **October/November 2018**

MARK SCHEME

Maximum Mark: 60

Published

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.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge International will not enter into discussions about these mark schemes.

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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.

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Each option has three questions:

Section A: (stimulus) Answer two questions from choice of four: (a)=2, (b)=4, (c)=4 and (d)=5 [15 total]
Section A: candidates answer two questions from a choice of four, based on the two specialist options they have studied. Each question is based on stimulus material and is divided into four parts. There are 2 marks for part (a), 4 marks for part (b), 4 marks for part (c) and 5 marks for part (d).

Section B: (design) Answer one question from choice of four: (a) = 10 marks, (b) = 8 marks [18 total]
Section B: candidates answer one design-based question from a choice of four, based on either of the two specialist options they have studied. The question is divided into two parts. There are 10 marks for part (a) and 8 marks for part (b).

Section C: (e) Answer one question from choice of four 12 marks. TOTAL MARKS = 60
Section C: candidates answer one essay question from a choice of four, based on either of the two specialist options they have studied. There are 12 marks for this question.

Questions will require candidates to consider approaches, research methods and issues and debates. The questions will be based on two topic areas (a, b, c, d, e) covered within the chosen specialist option. The two topic areas for each specialist option will be different to the two topic areas assessed in Paper 3.

In order to achieve the same standard across all questions in a Section, the same generic mark schemes are used for each option. These mark schemes are as follows.

Section A: Stimulus (Generic response descriptor)		
(a)	0–2	**1 mark** for basic answer e.g. identification. **1 mark** for elaboration/example.
(b)	0–4	Question always requires two ‘things’ **1 mark** basic answer. **2 marks** elaboration. Max 2 marks if only ‘one’ is answered.
(c)	0–4	Questions require either one or two ‘things’ **If two: 1 mark** basic answer. **2 marks** elaboration. **If one: 1–2 marks** basic answer. **3–4 marks** detailed answer/elaboration. If two required and only one provided, max 2 marks.
(d)	0–5	Question requires **discussion**. Question always **plural** of each argument. Question always requires conclusion. **1 mark** for each for/against argument (however detailed) up to 4 max. **1 mark** for conclusion. **Note:** If three (or more) arguments for one side, best two credited. If one side only, max 2 marks.
0	0	No response worthy of credit.

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Section C: Essay/Evaluate (Generic response descriptor)		
Level	Marks	Level Descriptor
4	10–12	• **Both sides** of the argument are considered and are relevant to the question. • **Appropriate examples** are included which fully support both sides. • Discussion is **detailed** with **good understanding** and clear expression. • A conclusion is drawn with appropriate justification.
3	7–9	• **Both sides** of the argument are considered and are relevant to the question. They may be **imbalanced** in terms of quality or quantity. • **Some examples** are included, are appropriate and often support both sides. • The answer shows good discussion with reasonable understanding. • A basic conclusion is drawn with little or no justification
2	4–6	• Reasons are limited to **one side** of the argument. • **Limited** reference to **examples**, or **lack of detail**. • The answer shows **some understanding**. • There is no conclusion. Max 4 marks for description of studies with no attempt to address the question.
1	1–3	• Anecdotal discussion, **brief detail**, minimal relevance. Very **limited range**. • Discussion may be **inaccurate** or incomplete. • May evaluate topic area studies, making only indirect reference to the question.
0	0	• No response worthy of credit.

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Section B: Design a study question part (a) (Generic response descriptor)		
Level	Marks	Level Descriptor
4	9–10	• The design is appropriate to the named investigation and is based on thorough psychological knowledge. • The design is accurate, coherent and detailed, and it tests the proposed investigation competently. • Four or five design features are included. The features are clearly applied to the design throughout the answer and the candidate clearly understands the main features involved in designing an investigation. • The response has proposed an appropriate design, has applied a range of relevant methodological design features with competence and shown clear understanding.
3	7–8	• The design is appropriate to the named investigation and is based on good psychological knowledge. • The design is accurate, coherent and detailed, and it tests the propose investigation competently. • Two or three design features are included. The features are often applied to the design and the candidate shows good understanding in places. • The response has proposed an appropriate design, has applied some relevant methodological design features and has shown good understanding.
2	4–6	• The design is mostly appropriate to the named investigation and is based on psychological knowledge. • The design is mostly accurate, coherent and detailed in places and it tests the proposed investigation. • Design features are limited in their understanding.
1	1–3	• The design may not be appropriate to the named investigation and use of terminology is sparse or absent. Basic psychological understanding is shown. • The design lacks coherence and is limited in understanding. • One or two appropriate design features are identified but incorrectly applied. The response lacks detail.
0	0	• No response worthy of credit. The candidate describes the study listed on the syllabus.

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Section B: Explain a study question part (b) (Generic response descriptor)		
Level	Marks	Level Descriptor
3	6–8	• Quality and depth of explanation is thorough. • Description of knowledge is accurate, coherent and detailed. • Psychological knowledge is clearly related to the design of the investigation. • Use of terms is accurate and use of psychological terminology is comprehensive. • Understanding of methodology (such as elaboration, use of example, quality of description) is very good. • The design is effectively explained in relation to the topic area. • There is a balance of methodology and topic area/relevant study knowledge.
2	4–5	• Quality of explanation and depth of explanation is competent. • Description of knowledge is mainly accurate, coherent and reasonably detailed. • Use of terms is mainly accurate and use of psychological terminology is competent. • Understanding of methodology (such as elaboration, use of example, quality of description) is good. • The design is adequately explained in relation to the topic area. • There is an imbalance of methodology and topic area/relevant study knowledge. • Max 5 marks if only methodological or psychological decisions.
1	1–3	• Quality of explanation and depth of explanation is basic. • Description of knowledge is often accurate, generally coherent, but lacks detail. • Psychological knowledge is unrelated to the design of the investigation. • Use of terms is basic and use of psychological terminology is adequate. • Understanding of methodology (such as elaboration, use of example, quality of description) is limited. • The design is poorly explained in relation to the topic area. • There is an imbalance of methodology and topic area/relevant study knowledge.
0	0	• No response worthy of credit

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Question	Answer	Marks
	Section A: Stimulus question Psychology and abnormality	
1	**People with symptoms of schizophrenia are often diagnosed through an interview with their doctor. Freeman (2008) says virtual reality (VR) is useful for symptom assessment and the treatment of psychotic disorders. Freeman also says this technology has many other applications.**	
1(a)	**Explain the symptoms of schizophrenia which are targeted by virtual reality.** **Marks: 1 mark** for basic answer e.g. identification. **1 mark** for elaboration/ example. **Most likely answer** (other appropriate responses to be credited): • Misinterpretation of other peoples' behaviour is a key feature of persecutory ideation. The occurrence and intensity of hallucinations is affected by the social context. • Negative symptoms such as anhedonia, asociality, and blunted affect reflect difficulties in social interactions. • Withdrawal and avoidance of other people is frequent in schizophrenia, leading to isolation and rumination. • The use of virtual reality (VR) – interactive immersive computer environments – allows one of the key variables in understanding psychosis, social environments, to be controlled.	**2**
1(b)	**Suggest <u>two</u> uses of virtual reality in abnormal psychology, other than the application to schizophrenia.** **Marks: 1 mark** basic answer. **2 marks** detailed answer/elaboration ×2 **Note:** candidates can make their own suggestions and answers must relate to VR and to abnormal psychology. **Most likely answer** (other appropriate responses to be credited): From the Freeman study: VR is used widely in many areas, for instance, • Perhaps the most striking application of **VR to psychiatric problems** has been for the treatment of **height phobia**. For example, Emmelkamp et al. 33 patients with acrophobia to 3 sessions of exposure to heights in vivo or in VR. Both forms of exposure were equally efficacious. Even though the patients knew the VR heights were not real, anxious responses were still triggered. The patients' responses to real or VR environments were equivalent. • Researchers have also shown that virtual heights can be presented equally effectively with a Head-Mounted Display or a Cave Automatic Virtual Environment 7 system in which images are projected into a room and the user wears stereoscopic shutter glasses. • VR has also been applied to the treatment of other anxiety conditions such as **post-traumatic stress disorder** (PTSD) and **flying phobia.**	**4**

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Question	Answer	Marks
1(c)	**Give <u>two</u> differences between the use of virtual reality for symptom assessment of schizophrenia and an interview with a doctor.** **Marks: 1 marks** basic answer **2 marks** elaboration ×2 **Most likely answer** (other appropriate responses to be credited): • Symptom assessment is usually carried out with the practitioner/doctor and patient sitting in a (bare) clinic room talking, with retrospective recall of the past week or month. In contrast, VR can provide a standardised assessment of **actual** symptom occurrence. • To date, VR has only been used for the experimental investigation of persecutory ideation. Clinical assessment is used regularly for every disorder. • Questionnaire assessments of paranoia cannot rule out paranoid thoughts that are grounded in reality. Even interview methods often cannot establish the truth of the claims underlying a suspicious thought. However, if a neutral social situation is presented using VR, any paranoid thoughts that occur are known to be unfounded.	**4**

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Question	Answer	Marks
1(d)	**Discuss the strengths and weaknesses of using virtual reality to treat schizophrenia. You should include a conclusion in your answer.** **Marks:** Question requires **discussion**; always **plural** of each argument, and always requires conclusion. **1 mark** for each advantage/disadvantage (however detailed) and related to the question up to 4 max. **1 mark** for two strengths/weaknesses unrelated to the question. **1 mark** for conclusion. **Most likely answer** (other appropriate responses to be credited): **Strengths:** • controls the environment allowing a range of situations and settings to be investigated • ensures patients with psychosis are not making up situations and symptoms • treatment can be conducted in a safe environment for both patient (and public) • has many uses. Freeman lists 7 uses: symptom assessment, identification of symptom markers, establishment of predictive factors, tests of putative causal factors, investigation of the differential prediction of symptoms, determination of toxic elements in the environment, and development of treatment. **Weaknesses:** • may have side effects such as simulator sickness – dizziness, nausea, headache and eyestrain • VR cannot establish truth of claims underlying suspicious thought (but neither can any method) • VR is only as good as the programmers ability to write an appropriate programme; • a programme may only apply generally and not be tailor-made for the needs of specific individuals. **Conclusion**: any appropriate conclusion drawn from the discussion that has been presented. 1 mark if appropriate. A conclusion is a 'decision reached by reasoning' and so a summary of points already made scores 0 marks.	**5**

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Question	Answer	Marks
	Section A: Stimulus question psychology and consumer behaviour	
2	**Hall et al. (2010) only studied the taste of jam and the smell of tea, but their participants were not told the full truth about the study.**	
2(a)	**Explain how the participants were recruited in the Hall et al. study.** **Marks: 1 mark** for basic answer e.g. identification. **1 mark** for elaboration/ example. **Most likely answer** (other appropriate responses to be credited): • 'Participants were recruited as they passed by a tasting venue we had set up in the store. We asked them whether they were willing to take part in a 'quality control' test of the jam and tea assortment at the store.' • This is an opportunity sample, gathered by asking participants to take part who were there at the time.	**2**
2(b)	**Give <u>two</u> 'criteria of detection' used in this study.** **Marks: 1 mark** basic answer (e.g. identification of term). **2 marks** elaboration (e.g. description of term) ×2 **Most likely answer** (other appropriate responses to be credited): Quote from study: We used three different criteria of detection for the manipulation trials. • **concurrent detection** if the participants voiced any concerns immediately after tasting or smelling the manipulated jam or tea. • **retrospective detection** if at the end of the experiment (either before or after the debriefing) the participants claimed to have noticed the manipulation. • **sensory-change detection** as a more implicit form of detection, even if the participants did not consciously report that something went wrong with their choice, we registered whether they for any reason described the taste or the smell of the chosen sample as somehow being different the second time around (i.e. tasting/smelling stronger, weaker, sweeter, etc., as determined by consensus agreement between two experimenters listening to the recorded experiment trials).	**4**

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Question	Answer	Marks
2(c)	**Identify <u>two</u> ways in which participants were deceived and suggest why each of these deceptions was necessary.** **Marks: 1 mark** for identifying each deception. **1 mark** for suggestion of why each was necessary ×2 **Most likely answer** (other appropriate responses to be credited): Quoting the study: • we recruited the participants by asking them whether they were willing to take part in a 'quality control' test of the jam and tea assortment at the store. • we presented ourselves as being independent consultants contracted to survey the quality of the jam and tea assortment in the shop. • unknown to the participants, on certain trials, we used a card magic trick to covertly exchange one face for the other. • we created two sets of 'magical' jars, lidded at both ends, and with a divider inside. These jars thus looked like normal containers, but were designed to hold one variety of jam or tea at each end, and could easily be flipped over to execute a switch. Suggestions 'why' • participants are deceived about the researchers (and the nature of the research) so the participants do not know it is a psychological study and so not show any demand characteristics. • participants have to be deceived about the 'magical jars' otherwise the study would simply not work.	**4**

Question	Answer	Marks
2(d)	**Discuss the advantages and disadvantages of field experiments when studying consumer behaviour. You should include a conclusion in your answer.** **Marks:** Question requires **discussion;** always **plural** of each argument, and always requires conclusion. **1 mark** for each advantage/disadvantage (however detailed) and related to the question up to 4 max. **1 mark** for two strengths/weaknesses unrelated to the question. **1 mark** for conclusion. **Most likely answer** (other appropriate responses to be credited): **Advantages:** • a field experiment has an IV, DV and controls; • often participants do not know they are taking part in a study and so behave more naturally (in the Hall et al. study consent given at the end). • Most consumer behaviour (e.g. shopping) takes place in the real world and so studies should be conducted in the real world (rather than in a laboratory). **Disadvantages:** • a field experiment may have variables that are more difficult to control than a laboratory experiment; • often participants do not know they have taken part in a study at all (in this study consent given at the end). • It may be reductionist to isolate variables to study (i.e. the IV) when many other variables that are controlled may contribute to consumer behaviour as a whole. **Conclusion**: any appropriate conclusion drawn from the discussion that has been presented. 1 mark if appropriate. A conclusion is a 'decision reached by reasoning' and so a summary of points already made scores 0 marks.	**5**

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Question	Answer	Marks
	Section A: Stimulus question psychology and health	
3	**According to Chung and Naya (2000), studies have shown that only one third of all patients and less than 50% of asthma patients take their pills as prescribed. Using TrackCap™, the following results were obtained.** **TrackCap™ compliance** — **Mean %**: **80**; **Median %**: **89**	
(a)	**Explain the difference between a mean and a median.** **Marks: 1 mark** for correct description of each. **Most likely answer** (other appropriate responses to be credited): • The **mean** is the sum of all the numbers in the set divided by the amount of numbers in the set. • The **median** is the middle point of a number set, in which half the numbers are above the median and half are below.	**2**
3(b)	**Suggest <u>one</u> way in which the Chung and Naya study was ethical and <u>one</u> way in which this study was unethical.** **Marks: 1 mark** basic answer. **2 marks** elaboration, twice. **Most likely answer** (other appropriate responses to be credited): • Written informed consent was obtained after patients received a description of the trial's purpose and procedures. The informed consent form mentioned that compliance, pulmonary function and safety would be measured. • Patients, however, were not informed that compliance was under electronic surveillance so as not to introduce an unacceptable bias in favour of compliance.	**4**
3(c)	**Give <u>two</u> reasons why a TrackCap™ device may not be a valid measure of adherence.** **Marks: 1** basic answer. **2 marks** detailed answer/elaboration ×2 **Most likely answer** (other appropriate responses to be credited): Quote from study: • The device, however, was programmed to recognise, but not accumulate, multiple openings that occurred within 1 min of each other. • If the cap was left off for 15 min or more, the device recorded one additional event. • To prevent extraneous results, study personnel were asked not to open the bottles before, during, or after the study period. • Just because the device records one instance of usage it does not mean the person has taken the medication. • There is no indication that the medication has been taken at the right time i.e. at times prescribed.	**4**

Question	Answer	Marks
3(d)	**Discuss the advantages and disadvantages of using objective measures of adherence to medical requests. You should include a conclusion in your answer.** **Marks:** Question requires **discussion;** always **plural** of each argument, and always requires conclusion. **1 mark** for each advantage/disadvantage (however detailed) and related to the question up to 4 max. **1 mark** for two strengths/weaknesses unrelated to the question. **1 mark** for conclusion. **Most likely answer** (other appropriate responses to be credited): **Advantages:** • objective measures involve no subjective comment (which may be dishonest answers) from a patient. • objective measures provide quantitative data which can be statistically analysed. • objective measures may involve measuring physiological processes out of the control of a patient. **Disadvantages:** • a patient should be allowed to comment, subjectively, on their own medication and why they may not be taking it. • the objective measure may not be valid: the recording device only records the medication leaving the container (for example) • objective measures give numbers; it does not give explanations. **Conclusion:** any appropriate conclusion drawn from the discussion that has been presented. 1 mark if appropriate. A conclusion is a 'decision reached by reasoning' and so a summary of points already made scores 0 marks.	**5**

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Question	Answer	Marks
	Section A: Stimulus question psychology and organisations	
4	**Manager José was bullied at work for many years. The bullies argued with him every day and stole his belongings. Eventually he left to work for an employer where bullying was not tolerated.**	
4(a)	**Explain the effects bullying may have on an individual in the workplace.** **Marks: 1 mark** for basic answer e.g. identification. **1 mark** for elaboration/ example. **Most likely answer** (other appropriate responses to be credited): • health effects such as symptoms of stress, possible post-traumatic stress syndrome. • Withdrawal from work such as absenteeism; withdrawal from any work-based social activity. • Inability to concentrate on tasks at work. • Decision to leave the workplace • Some victims of bullying may have suicidal thoughts.	**2**
4(b)	**Suggest <u>two</u> phases in the development of bullying at work.** **Marks: 1** basic answer. **2 marks** detailed answer/elaboration ×2 **Most likely answer** (other appropriate responses to be credited): Quote from study: • In the early phases of the bullying, victims are typically subjected to aggressive behaviour that is difficult to pinpoint by being very indirect and discreet. • Later on more direct aggressive acts appear. The victims are clearly isolated and avoided, humiliated in public by being made a laughing-stock of the department, and so on. • In the end both physical and psychological means of violence may be used. Quote from study (also to be credited): Bullying seems to contain at least four phases: • aggressive behaviour: a situation where rather subtle aggressive outlets start to be directed against one or more persons in the work group. • bullying, where these aggressive outlets become more open, direct and frequent. In this second phase it becomes evident that the victim has problems in defending him/herself either as a consequence of already existing psychological or social factors, or as a consequence of the bullying itself, which after a while seems to place a social stigma on the victim. • stigmatisation and severe trauma. Credit can also be given for Allport's (1954) phases.	**4**

Question	Answer	Marks
4(c)	**Give <u>two</u> differences between dispute-related bullying and predatory bullying.** **Marks: 1** basic answer. **2 marks** detailed answer/elaboration ×2 **Most likely answer** (other appropriate responses to be credited): Quote from study: • **dispute-related** aggression develops out of grievances and involves social control reactions to perceived wrong-doing. A work-related conflict. • **dispute-related** bullying occurs as a result of an highly escalated interpersonal conflict. • **Predatory bullying** refers to cases where the victim personally has done nothing provocative that may reasonably justify the behaviour of the bully. • the victim is accidentally in a situation where **a predator** either is demonstrating power or in other ways is trying to exploit an accidental victim into compliance. • the victim is attacked because he or she belongs to a certain out-group	**4**
4(d)	**Discuss the advantages and disadvantages of using interviews to investigate bullying at work. You should include a conclusion in your answer.** **Marks:** Question requires **discussion;** always **plural** of each argument, and always requires conclusion. **1 mark** for each advantage/disadvantage (however detailed) and related to the question up to 4 max. **1 mark** for two strengths/weaknesses unrelated to the question. **1 mark** for conclusion. **Most likely answer** (other appropriate responses to be credited): **Advantages**: • interviews allow people to present their side of the study in full detail; • interviews can be done in a safe and private environment; • an interview could be unstructured, allowing free interaction; it could be structured allowing management to cover 'essential' questions. • the interview can be recorded providing evidence of what was said should it be needed. **Disadvantages**: • people may be reluctant to be interviewed, to 'blow the whistle', to bring the bullying into the open; • people may not tell the truth, hiding information or modifying it. • people may not tell the truth for fear of revenge or further attacks/ bullying • people think they will be perceived as weak, inferior or inadequate by management. **Conclusion**: any appropriate conclusion drawn from the discussion that has been presented. 1 mark if appropriate. A conclusion is a 'decision reached by reasoning' and so a summary of points already made scores 0 marks.	**5**

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Question	Answer	Marks
	Section B: Design question (a)=10 marks, (b)=8 marks	
5(a)	**Design a longitudinal study to investigate whether electro-convulsive therapy (ECT) as a treatment for schizophrenia has side effects.** **Marks:** use generic levels of response 'Design a study' question part (a). **Additional**: Candidates should design the study showing evidence of design features appropriate to the named method. The named method is: any appropriate method, but must be **longitudinal**. Typical features: • **Experiments**: type, IV, DV, controls, experimental design. • **Observations**: type, setting, response categories, sampling frame, number of observers. • **Questionnaires/Interviews**: type, setting, example questions. Scoring/rating scale, analysis of responses. • **Typical features of research methodology**: sampling technique and sample, type of data, ethics, reliability, validity, data analysis.	**10**
5(b)	**Explain the psychological and methodological evidence on which your study is based.** **Marks:** use generic levels of response 'Design a study' question part (b). Note: If **only** methodological or psychological explanation is provided max 5 marks. Candidates are expected to explain the reasons for the suggested design in part (a). Explanation should be both psychological and methodological. Psychological to include appropriate theory or research. **Additional:** candidates are expected to justify their decisions or evidence presented regarding the design made in answer to question part **(a)**. **Syllabus:** treatment and management of schizophrenia and delusional disorder: electro-convulsive therapy. ***Psychological****:* ECT: possible side effects: 20% to 50% of the people who respond well to a course of ECT relapse within 6 months; Short-term memory loss is often reported. Many patients perceive the treatment as terrifying and shameful. Immediately after treatment the patient is often confused (and the confusion may not be temporary) ***Methodological****:* explanation of method using typical features as above.	**8**

Question	Answer	Marks
6(a)	**Design a study to investigate whether slogans linked to a brand are recalled significantly more than slogans which are not linked to a brand.** **Marks:** use generic levels of response 'Design a study' question part (a). **Additional**: Candidates should design the study showing evidence of design features appropriate to the named method. The named method is: **any appropriate method.** Typical features: • **Experiments**: type, IV, DV, controls, experimental design. • **Observations**: type, setting, response categories, sampling frame, number of observers. • **Questionnaires/Interviews**: type, setting, example questions. Scoring/rating scale, analysis of responses. • **Typical features of research methodology**: sampling technique and sample, type of data, ethics, reliability, validity, data analysis.	**10**
6(b)	**Explain the psychological and methodological evidence on which your study is based.** **Marks:** use generic levels of response 'Design a study' question part (b). Note: If **only** methodological or psychological explanation is provided max 5 marks. Candidates are expected to explain the reasons for the suggested design in part **(a)**. Explanation should be both psychological and methodological. Psychological to include appropriate theory or research. **Additional:** candidates are expected to justify their decisions or evidence presented regarding the design made in answer to question part **(a)**. **Syllabus:** advertising applications: effective slogans (Kohli et al., 2007). ***Psychological****:* Kohli et al (2007): slogans enhance a brand's image, aid in its recognition and recall, and help create brand differentiation in consumers' minds. There is little agreement as to what constitutes a successful slogan. As such, although marketing managers use slogans extensively, they are often at a loss when it comes to creating them. In turn, this leads to ineffective use of slogans and, ultimately, the possibility of a surprisingly poor linkage between a brand and its slogan, even among the most well-known brands. Based on our investigation, we propose in this article a series of guidelines for the strategy behind slogans, and on creation and utilization of effective slogans. ***Methodological****:* explanation of method using typical features as above.	**8**

Question	Answer	Marks
7	**Zahir has broken his leg. You want to know if Zahir's leg is hurting less over time.**	
7(a)	**Design a study using observation to measure Zahir's pain over time.** **Marks:** use generic levels of response Design a study question part (a). **Additional**: Candidates should design the study showing evidence of design features appropriate to the named method. The named method is: **observations.** Typical features: • **Observations**: type of observation in relation to participants, observers, setting and data. Also response categories, sampling frame, number of observers. • **Typical features of research methodology**: sampling technique and sample, type of data, ethics, reliability, validity, data analysis.	**10**
7(b)	**Explain the psychological and methodological evidence on which your observation is based.** **Marks:** use generic levels of response 'Design a study' question part (b). Note: If **only** methodological or psychological explanation is provided max 5 marks. Candidates are expected to explain the reasons for the suggested design in part (a). Explanation should be both psychological and methodological. Psychological to include appropriate theory or research. **Additional:** candidates are expected to justify their decisions or evidence presented regarding the design made in answer to question part **(a)**. **Syllabus:** measuring pain: behavioural/observational measures (UAB pain behavior scale). ***Psychological****:* • The UAB (University of Alabama at Birmingham) pain scale is designed to observe levels of pain over time. A nurse/health worker observes behavioural expressions of pain at different times during a day (or night) and records on a daily chart. A total score can be recorded each day and compared with the next to determine whether the pain is reducing over time. • Turk (1985) identifies four pain behaviours: facial/audible expression of distress; distorted ambulation or posture; negative affect; avoidance of activity. ***Methodological****:* explanation of method using typical features as above.	**8**

Question	Answer	Marks
8(a)	**Design a study to investigate how much managers know about Maslow's hierarchy of needs.** **Marks:** use generic levels of response Design a study question part (a). **Additional**: Candidates should design the study showing evidence of design features appropriate to the named method. The named method is: **any appropriate method**. Typical features: • **Experiments**: type, IV, DV, controls, experimental design. • **Observations**: type, setting, response categories, sampling frame, number of observers. • **Questionnaires/Interviews**: type, setting, example questions. Scoring/rating scale, analysis of responses. • **Typical features of research methodology**: sampling technique and sample, type of data, ethics, reliability, validity, data analysis.	**10**
8(b)	**Explain the psychological and methodological evidence on which your study is based.** **Marks:** use generic levels of response 'Design a study' question part (b). Note: If **only** methodological or psychological explanation is provided max 5 marks. Candidates are expected to explain the reasons for the suggested design in part (a). Explanation should be both psychological and methodological. Psychological to include appropriate theory or research. **Additional:** candidates are expected to justify their decisions or evidence presented regarding the design made in answer to question part **(a)**. **Syllabus:** need theories: hierarchy of needs (Maslow, 1970). ***Psychological****:* Maslow's need-hierarchy: five to tier hierarchy: physiological, safety, social, esteem and self actualisation, later expanded to eight. Starting with physiological each must be satisfied in order. 1. Physiological: food, drink, warmth, etc.; 2. Safety: protection from harm, need for law and order; 3. Social: need for affection, relationships and family; 4. Esteem: need for achievement, mastery of skills, status; 5. Cognitive: having knowledge and understanding; 6. Aesthetic: the appreciation and search for beauty; 7. Self actualisation: realising potential; fulfilment; 8. Transcendent: helping others to achieve self-actualisation. ***Methodological****:* explanation of method using typical features as above.	**8**

Question	Answer	Marks
	Section C: Evaluation question = 12 marks	
9	***'In the future it will be a fact that the cause of depression is biological.'*** **To what extent do you agree with this statement? Use examples of research you have studied to support your answer.** **Marks:** use generic levels of response in table C. **Syllabus:** Explanations of depression: biological: genetic and neurochemical (Oruc et al., 1997) **Most likely** (any other appropriate responses should be credited): For: • Research in genetics/DNA makes advances every day; only a matter of time before a gene for depression is discovered. • Research currently supports genetic links: Oruc et al. (1998) 50% of first-degree relatives of people with depression are significantly more likely to be depressed. • Research may identify specific chemicals/hormones triggering depression. Against: • There is still insufficient evidence and that evidence is weak: Oruc has only 50% and if it were 'truly genetic' it would be 100%. • There may be an underlying genetic link, but this only becomes active with interactions with the environment. • Many studies show twins where one develops a disorder and the other does not because of environmental influences such as peers. • The response of the body may be biological, and this may be due to a chemical imbalance, but the cause of depression can also be an external event and that will never change.	**12**

Question	Answer	Marks
	Section C: Evaluation question = 12 marks	
10	***'Researching the effect of advertising on children is not useful.'*** **To what extent do you agree with this statement? Use examples of research you have studied to support your answer.** **Marks:** use generic levels of response in table C. **Syllabus:** types of advertising and advertising techniques: product placement in films (Auty and Lewis, 2004) **Most likely** (any other appropriate responses should be credited): **useful:** • Children are more likely to be influenced they are young, malleable and naïve. • Children observe and imitate: a film character using a product is likely to be imitated by children. • Studies have shown that children identify with products and cartoon characters (and others) that are associated with products (e.g. M&M's 'creatures'). • Children are major consumers, they eat food and drink, and advertising e.g. 'Ronald McDonald' leads children to eat burgers which may well continue long into adulthood. **not useful:** • Children are not major consumers; they do not purchase houses, cars, major goods or food for the family. Advertising for children has little effect on major household purchases. • Children are at an early stage in life and they will grow, change and develop in very different ways; children are not miniature adults, they are very different. • What applies to children today will not apply tomorrow. Technology, for example, is ever changing so advertising to children a product today will have little effect when they become adults ten or more years later.	**12**

Question	Answer	Marks
Section C: Evaluation question = 12 marks		
11	**'*Failure to attend a medical appointment should be punished.*'** **To what extent do you agree with this statement? Use examples of research you have studied to support your answer.** **Marks:** use generic levels of response in table C. **Syllabus:** types of non-adherence and reasons why patients don't adhere; why patients don't adhere: rational non-adherence (Bulpitt, 1994) **Most likely** (any other appropriate responses should be credited): For: • If a punishment is threatened, people are much more likely to adhere to avoid the punishment. • If people are punished behaviourist principles suggest that the person will not want to miss an appointment again. • Missing an appointment may be bad for the person's health; attending would help. Punishment may force people to take medication and avoid long-term ill health. Against • punishments which are automatically applied do not take into account a legitimate reason for failure to attend. • People are more likely to respond to 'cognitive explanations' for adherence rather than behavioural punishments. • It depends what the punishment is: if money, some people will still ignore the punishment; others will pay because the fine is minimal; others will not be able to afford a fine.	**12**

Question	Answer	Marks
Section C: Evaluation question = 12 marks		
12	***'Managers only need to set clear goals to motivate their workers.'*** **To what extent do you agree with this statement? Use examples of research you have studied to support your answer.** **Marks:** use generic levels of response in table C. **Syllabus:** Motivation to work: cognitive theories: goal-setting theory (Latham and Locke, 1984) **Most likely** (any other appropriate responses should be credited): **For:** • Goal-setting is a motivator, and if the goals are 'SMART' (specific, measurable, attainable, realistic and time-based) regular targets can be set and achieved. • Achieving goals gives a sense of self-worth – it allows people to feel good about themselves and to self-actualise. • Some people like daily targets; some organisations pay workers when targets are achieved. • Successful managers become skilled at setting appropriate targets for their workers. **Against:** • Some people are motivated more by extrinsic motivators, such as pay (so intrinsic motivation such as goal-setting is irrelevant) • Poorly designed targets which are difficult to achieve can be de-motivating. • What works for one manager and workers in one organisation may not generalise to others. Goal setting only works for some managers with some workers in some organisations. There are individual differences in worker motivation so the statement in the question is too general.	**12**

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