Cambridge Assessment International Education

Cambridge International AS & A Level

PSYCHOLOGY **9990/42**

Paper 4 Specialist Options: Application **March 2020**

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.

Cambridge International is publishing the mark schemes for the March 2020 series for most Cambridge IGCSE™, Cambridge International A and AS Level components and some Cambridge O Level components.

[Turn over

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.

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. **N.B.** 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.

Section C: Essay/Evaluate (Generic response descriptor)		
Level	Marks	Level Descriptor
N.B.: Questions are always worded in the same way: 'to what extent do you agree with this statement? Use examples of research you have studied to support your answer'. However, the words 'research' must be taken in the widest sense: (i) different examples can be used from the same piece of research; (ii) examples from different pieces of research; (iii) examples from methodology, such as a specific method or technique; (iv) examples from methodological issues such as ethics, generalisations, quantitative/qualitative data; psychological versus physiological, etc. (v) examples of debates and issues such as reductionism & holism; individual & situational, etc.		
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/[both sides basic]. • **Limited** reference to **examples**, or **lack of detail**. • The answer shows **some understanding**. • There is no conclusion.
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. • [May **describe** relevant studies with minimal reference to the question].
0	0	• No response worthy of credit.

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. The candidate describes the study listed on the syllabus.
0	0	• No response worthy of credit.

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. • 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. • 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

Question	Answer	Marks
	Section A: Stimulus question Psychology and abnormality	
1	**The Beck depression inventory (BDI) includes 21 items, all of which are assessed on a four-point scale. One of the items is 'irritation', as shown below.** **0 I am no more irritated by things than I ever was.** **1 I am slightly more irritated now than usual.** **2 I am quite annoyed or irritated a good deal of the time.** **3 I feel irritated all the time.**	
1(a)	**State <u>two</u> items from the BDI, other than 'irritation'.** **Most likely answer** (other appropriate responses to be credited): Q1 sad, Q2 future discouraged, Q3 feel like failure, Q4 no satisfaction/enjoyment, Q5 guilt, Q6 punished, Q7 disappointed, Q8 feeling worse/blame self, Q9 thoughts of killing self, Q10 crying, Q12 lost interest, Q13 decision-making, Q14 look worse/unattractive, Q15 working well/push hard, Q16 sleep, Q17 tiredness (fatigue), Q18 appetite, Q19 lost weight, Q20 health, Q21 lost interest in sex. **Marks: 1** mark for correct identification of item. X2	**2**
1(b)	**Explain the theory on which the BDI is based.** **Most likely answer** (other appropriate responses to be credited): Beck (1979) believes that people react differently to aversive stimuli because of the thought patterns that they have built up throughout their lives. Schemas (core beliefs) are formed in early life, and include self-blame schema and ineptness schema. A person has negative automatic thoughts (NATs). The negative cognitive triad, comprises unrealistically negative views about the self, the world and the future. **Marks:** 1 mark basic answer (basic e.g. faulty cognition or cognitive triad.) 2–4 marks detailed answer/elaboration (e.g. what cognitive triad involves). 0 marks for learned helplessness or attribution theory. 0 marks for description of BDI.	**4**
1(c)(i)	**Suggest how the reliability of the BDI could be assessed.** **Most likely answer** (other appropriate responses to be credited): • **Reliability: test-retest** (way of judging reliability by administering the same test to the same person on two different occasions and comparing the result). • **Reliability: split half** (splitting a test in two halves and administering each half to the same person. The two scores should match). **Marks:** 1 mark basic answer (e.g. identification of term) 2 marks detailed answer/elaboration (term does not need to be identified). 0 marks for inter-rater reliability; 0 marks for 'comparing with other studies'; 0 marks for definition.	**2**

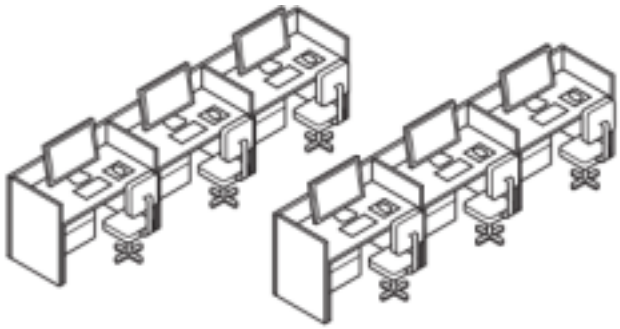
Question	Answer	Marks
1(c)(ii)	**Suggest how the validity of the BDI could be assessed.** **Most likely answer** (other appropriate responses to be credited): • Validity: concurrent validity – compared with an alternative measure • Face validity – it looks like it measures depression. • Other types of validity, but not ecological validity. **Marks:** 1 mark basic answer (e.g. identification of term), 2 marks detailed answer/elaboration.	**2**
1(d)	**Discuss the strengths and weaknesses of using self-report questionnaires to measure depression. You should include a conclusion in your answer.** **Most likely answer** (other appropriate responses to be credited): **Strengths** • Asking people directly means that participants are given the opportunity to express their feelings and explain their behaviour rather than the researcher trying to work out reasons for their behaviour from other methods • Relatively large numbers of participants can be done relatively easily. Questionnaires are easy to replicate. • Data can be qualitative, but may also be quantitative depending on type of question • Quantitative data (as used in this inventory) can be scored and compared to all other people completing the questionnaire. **Weaknesses**: • Some participants may provide socially desirable responses; not give truthful answers; respond to demand characteristics. • Closed/fixed choice questions may force people into choosing answers that do not reflect their true opinion and therefore may lower the validity. • Researchers have to be careful about use of leading questions; it could affect the validity of the data collected. **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. **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. **2** marks max for two strengths/weaknesses unrelated to the question. **1 mark** for conclusion.	**5**

Question	Answer	Marks
	Section A: Stimulus question psychology and consumer behaviour	
2	**A company wants to increase sales of canned soup. They want customers to buy 2, 3, 4 or even 10 cans, rather than buying only one. They apply some of the point of purchase promotion techniques, e.g. multiple unit pricing, suggested by Wansink et al. (1998).**  **Fig. 2.1**	
2(a)	**Explain what is meant by 'multiple unit pricing'.** **Most likely answer** (other appropriate responses to be credited): multiple unit price promotions is where a price reduction is presented as a reduced total price for multiple units of the same item (e.g., an item regularly priced at $0.50 each is promoted as '4 for $2'). **Marks: 1 mark** basic answer (simple description), **2 marks** detailed answer/elaboration/example. **N.B.:** 0 marks for discount if more items purchased such as buy one get one free.	**2**
2(b)	**Suggest <u>two</u> other point of purchase promotion techniques that increase sales, using examples to support your answer.** Quotes from study: • **Purchase quantity limits** is when customers react to the loss of freedom to buy more. It suggests stocks are limited at the 'special low price' and so six should be purchased immediately, e.g. limit of six cans per customer. • **Suggestive selling** is where the sales person asks the customer if they would like to include an additional purchase or recommends a product which might suit them/their needs/usage e.g. buy twelve for your freezer. It is also known as add-on selling, upselling and cross-selling. **Marks:** 1 mark basic answer (identification of term), 2 marks detailed answer/elaboration or use of example x2. Max 2 marks if only 'one' is answered.	**4**

Question	Answer	Marks
2(c)	**Explain <u>one</u> strength and <u>one</u> weakness of using students as participants in research on purchase quantity decisions.** **Most likely answer** (other appropriate responses to be credited): Strengths: • students may have limited resources, like many other people and may purchase more items if it is a bargain. • students are readily available to researchers and they are consumers like anyone else. Students may have limited resources and be restricted in what they purchase. Weaknesses: • students may be single people with no dependents (children) and so purchase a limited range of items. • Students, being younger, may not be experienced shoppers and be less experienced with sales 'tricks of the trade'. **Marks:** 1 mark basic answer, 2 marks detailed answer/elaboration or use of example x2. Max 2 marks if only 'one' is answered.	**4**
2(d)	**Discuss the advantages and disadvantages of conducting laboratory experiments to investigate purchase quantity decisions. You should include a conclusion in your answer.** **Most likely answer** (other appropriate responses to be credited, such as eye movement patterns): **Advantages:** • a laboratory experiment has an IV, DV and controls; • laboratory experiments are reductionist so one variable can be isolated and studied. • participants know they are taking part in a study (so give consent but not informed consent). • IV can be studied precisely using scientific equipment • Extraneous situational variables can be controlled **Disadvantages:** • 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). • 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. • Participants may respond to demand characteristics. **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. **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. **2** marks max for two strengths/weaknesses unrelated to the question. **1 mark** for conclusion.	**5**

Question	Answer	Marks
	Section A: Stimulus question psychology and health	
3	 Fig. 3.1	
3(a)	**Explain what is meant by the term 'psychometric test'.** **Most likely answer** (other appropriate responses to be credited): A psychometric test is a 'measure of the mind'; more importantly it is both valid and reliable. Psychometric tests are standardised, and so comparable with a sample of results already obtained. **Marks:** 1 mark for 'measure of mind'; 2 marks detailed answer/elaboration/ example e.g. MPQ.	**2**
3(b)	**Explain the difference between 'acute pain' and 'chronic pain', using an example of each.** **Most likely answer** (other appropriate responses to be credited): • Acute pain: short-term, temporary (e.g. finger trapped in a door) • Chronic pain: long term (3 months or more) e.g. arthritis. **Marks:** 2 marks for acute versus chronic difference; 2 marks for example of each.	**4**

Question	Answer	Marks
3(c)	**Suggest <u>one</u> advantage and <u>one</u> disadvantage of using a clinical interview to measure pain. Use an example in your answer.** **Marks:** 1 mark for identification of each control group. **Advantage** • Patient can explain in detail how their pain feels • Practitioner can hear from the patient themselves • Patient is part of the assessment process. It is their pain. **Disadvantage** • Patient may not be able to adequately describe their pain (limited terminology) • Practitioner may misinterpret description if non-medical terminology is used. • Pain experience is not comparable if no psychometric measure is used. **Marks: 1** mark for advantage and 1 mark for example; 1 mark for disadvantage and 1 mark for example. 2 marks for one example if detailed and appropriate.	**4**
3(d)	**Discuss the strengths and weaknesses of using psychometric tests to measure pain. You should include a conclusion in your answer.** **Most likely answer** (other appropriate responses to be credited): **Strengths:** • quantitative data allows comparison between one person and another • subjectivity of a clinical interview is said to be removed. • person can complete the questionnaire/scale in their own time **Weaknesses:** • quantitative data results from subjective estimation by person • person may exaggerate extent of pain to receive more medication or be treated faster. • person may not understand terminology used, such as 'lancinating'. • person cannot express how they really feel or are experiencing the pain. • completing a questionnaire may not be appropriate for a person in severe pain. **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. N.B.: credit MPQ, PPQ as examples and alternative measures for examples, such as clinical interview. No credit for qualitative data as this is not a psychometric measure. **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. **2** marks max for two strengths/weaknesses unrelated to the question. **1 mark** for conclusion.	**5**

Question	Answer	Marks
	Section A: Stimulus question psychology and organisations	
4	**Oldham and Brass (1979) studied open plan offices, such as shown in Fig. 4.1.**  **Fig. 4.1.**	
4(a)	**Explain what is meant by an 'open plan office'.** **Most likely answer** (other appropriate responses to be credited): Open plan places worker desks in large, open spaces, to create the feeling of space and minimizes the use of small, enclosed rooms such as private offices. **Marks:** 1 mark basic answer (simple description), 2 marks detailed answer/elaboration.	**2**
4(b)	**Suggest <u>two</u> job characteristics that may be affected by office design.** **Most likely answer** (other appropriate responses to be credited): e.g. Oldham and Brass From study: • **Autonomy:** the degree to which a job provides substantial freedom, independence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out • **Task identity**: the degree to which a job requires completion of a 'whole' and identifiable piece of work, that is, doing a job from beginning to end with a visible outcome • **Supervisor and co-worker feedback** refer to the degree to which supervisors and co-workers provide performance feedback to employees. • **Friendship opportunities** this refers to the degree to which employees have the opportunity to develop close friendships at work **Marks:** 1 mark basic answer, 2 marks detailed answer/elaboration for each X2	**4**

Question	Answer	Marks
4(c)	**Outline <u>two</u> of the dependent variables (outcome measures) in the study by Oldham and Brass.** **Most likely answer** (other appropriate responses to be credited): The outcome measures are as follows: • **Work satisfaction** is the degree to which an employee is satisfied and happy with the job. This variable was measured with nine items from the JDS, which were designed to tap 'general' and 'growth' satisfactions at work. The nine items were averaged to form a work satisfaction index. • **Interpersonal satisfaction** is the degree to which an employee is satisfied with co-workers and supervisors at work. Six items from the 'social' and 'supervisory' satisfaction sections of the JDS were averaged to form the measure of interpersonal satisfaction. • **Internal work motivation** is the degree to which an individual experiences positive internal feelings when performing effectively on the job. Six items were averaged to form the measure of internal motivation. This measure has been found to relate substantially to measures of employees' work performance **Marks:** 1 mark basic answer, 2 marks detailed answer/elaboration x2.	**4**

Question	Answer	Marks
4(d)	**Discuss the advantages and disadvantages of gathering qualitative data using interviews to study workers' views of open plan offices. You should include a conclusion in your answer.** **Most likely answer** (other appropriate responses to be credited): Self-reports can include questionnaires and interviews. **Advantages** • Asking people directly means that participants are given the opportunity to express their feelings and explain their experiences rather than the researcher trying to work out reasons for their behaviour from other methods • People can give as much information as they wish, but they can also say little or nothing if they wish. • Data can be qualitative, but may also be quantitative depending on type of question **Disadvantages** • Some participants may provide socially desirable responses; not give truthful answers; respond to demand characteristics. • Qualitative data tends not to lead to the calculation of statistics to allow comparison. • Researchers have to be careful about use of leading questions; it could affect the validity of the data collected. **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. **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. **2** marks max for two strengths/weaknesses unrelated to the question. **1 mark** for conclusion.	**5**

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 depression 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. N.B.: max 1–3 marks if the design is not longitudinal [generic: The design may not be appropriate to the named investigation]	**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). N.B. 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:** Bipolar and related disorders: 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). **N.B.** 2 marks max if psychological knowledge is not related to answer. ***Methodological****:* explanation of method using general and specific features as above.	**8**

Question	Answer	Marks
6(a)	**Design an experiment to investigate the difference between high self-monitors and low self-monitors in relation to brand recognition.** **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: **experiment**. **Typical features:** Experiments: type, IV, DV, controls, experimental design. **General features of research methodology:** sampling technique and sample, type of data, ethics, reliability, validity, data analysis. Logically a laboratory experiment with IV of high self-monitors and low self-monitors (determined by self-monitoring test). Brands could be presented with a DV or time it takes to identify the brand correctly.	**10**
6(b)	**Explain the psychological and methodological evidence on which your experiment is based.** **Marks:** use generic levels of response 'Design a study' question part (b). N.B. 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:** brand recognition in children (Fischer et al., 1991); advertising and consumer personality (Snyder and DeBono, 1985) ***Psychological****:* Fischer et al. (1991) studied brand recognition in children not adults; Snyder and DeBono (1985) studied advertising and consumer personality so this design must, at very least, combine aspects of both studies. **N.B.** 2 marks max if psychological knowledge is not related to answer. ***Methodological****:* explanation of method using general and specific features as above.	**8**

Question	Answer	Marks
7(a)	**Design a study using a questionnaire to investigate gender differences in rational non-adherence to medical requests.** **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: **questionnaire**. **Specific features**: **Questionnaires/Interviews**: type, setting, example questions. Scoring/rating scale, analysis of responses. **General features of research methodology**: sampling technique and sample, type of data, ethics, reliability, validity, data analysis. Logically candidates will construct a questionnaire asking about rational non-adherence and give it to a sample of males and of females. Age could be controlled.	**10**
7(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). N.B. 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:** why patients don't adhere: rational non-adherence (Bulpitt, 1994) ***Psychological****:* Patients make a **rational decision** not to adhere (they are exercising their *free will*). They might believe that the treatment will cause more problems than it solves. **Bulpitt** (1998) studied male participants taking a drug for hypertension (high blood pressure). Because of side effects many of the men made the rational decision to stop taking the medicine. **N.B.** 2 marks max if psychological knowledge is not related to answer. ***Methodological****:* explanation of method using general and specific features as above.	**8**

Question	Answer	Marks
8(a)	**Design a study to investigate worker preference for the metropolitan or the continental rapid rotation system of shiftwork.** **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**. **Specific 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. **General features of research methodology**: sampling technique and sample, type of data, ethics, reliability, validity, data analysis. Logically candidates will choose an experiment with IV being the two shifts and the DV being worker preference assessed on a questionnaire or through an interview.	**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). N.B. 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:** shiftwork: rapid rotation theory (metropolitan rota and continental rota); slow rotation theory (Pheasant, 1991) ***Psychological****:* • *Metropolitan rota*: work two early (6 am to 2 pm), two late (2 pm to 10 pm), two night (10 pm to 6 am), two rest. • *Continental rota*: work two early, two late, three night, two rest, then two early, three late, two night, three rest. **N.B.** 2 marks max if psychological knowledge is not related to answer. ***Methodological****:* explanation of method using general and specific features as above.	**8**

Question	Answer	Marks
	Section C: Evaluation question = 12 marks	
9	**'*Cognitive explanations of schizophrenia ignore the effects of nature.*'** **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 schizophrenia and delusional disorder: cognitive (Frith, 1992); A2 issue of reductionism. **Most likely** (any other appropriate responses should be credited): **For:** • People are different and what applies to some people will not apply to many others • There are alternative approaches: genetic, biochemical and cognitive • Being reductionist may exclude the role of other contributory factors **Against:** • The cognitive explanation is useful because schizophrenia in many people is due to 'cognitive' factors • Reducing to one explanation allows it to be studied more specifically to identify individual factors responsible. • Useful because a treatment is based on this approach – cognitive behaviour therapy.	**12**

Question	Answer	Marks
	Section C: Evaluation question = 12 marks	
10	***'Field experiments on consumer behaviour conducted in one country, such as that on choice blindness by Hall et al. (2010), cannot be generalised to other countries.'*** **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:** intuitive thinking and its imperfections: choice blindness (Hall et al., 2010) **Most likely** (any other appropriate responses should be credited): **Can:** • There are many similarities between shopper behaviour in different countries. • The cognitive processes of shoppers are the same, such as choice blindness • Experiments anywhere can control many extraneous variables **Cannot:** • Specific conditions created in one country cannot be recreated in a different country (e.g. outdoor temperatures, etc.) • People are different: the reasons for shopping; different priorities, amounts of money, etc. • Shops themselves are different: large malls, supermarkets.	**12**

Question	Answer	Marks
	Section C: Evaluation question = 12 marks	
11	***'Improving practitioner style will have no effect on adherence to medical advice.'*** **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:** improving adherence: improve practitioner style (Ley, 1988) **Most likely** (any other appropriate responses should be credited): **No effect:** • Some people apply rational non-adherence, whatever the practitioner tells them • Some people have unrealistic optimism / illusion of invulnerability • Some people apply the health belief model with the practitioner, just one factor that determines their adherence. **Has effect:** • Some people listen to a medical practitioner and obey or comply with orders • Studies by Ley for example have shown that changing several features improves adherence (e.g. emphasising key information, simplifying instructions, etc) • Ley et al. found adherence improves with presentation techniques • Other studies have found changing practitioner style (doctor-centred to patient-centred) improves adherence.	**12**

Question	Answer	Marks
	Section C: Evaluation question = 12 marks	
12	**'*Maslow's hierarchy of needs is culturally biased because it was developed in the United States.'*** **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:** need theories: hierarchy of needs (Maslow, 1970) **Most likely** (any other appropriate responses should be credited): **Only USA:** • The hierarchy has needs that may not apply in all cultures (perhaps aesthetic and transcendent) • Some societies are individualistic and based on competition and this is reflected in the hierarchy (e.g. need for achievement at work). • Some societies are co-operative and based on co-operation and this is not reflected in the hierarchy. **World-wide:** • The hierarchy has many features common to all people (such as physiological needs) • The model explains human needs, motivation and the desire to self-actualise, common in all people. • The hierarchy considers whole-life development extending to self-actualisation.	**12**