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PSYCHOLOGY

9990/31

Paper 3 Specialist Options: Theory

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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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This document consists of **22** printed pages.

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.

**Social Science-Specific Marking Principles
(for point-based marking)****1 Components using point-based marking:**

- Point marking is often used to reward knowledge, understanding and application of skills. We give credit where the candidate's answer shows relevant knowledge, understanding and application of skills in answering the question. We do not give credit where the answer shows confusion.

From this it follows that we:

- a** DO credit answers which are worded differently from the mark scheme if they clearly convey the same meaning (unless the mark scheme requires a specific term)
- b** DO credit alternative answers/examples which are not written in the mark scheme if they are correct
- c** DO credit answers where candidates give more than one correct answer in one prompt/numbered/scaffolded space where extended writing is required rather than list-type answers. For example, questions that require *n* reasons (e.g. State two reasons ...).
- d** DO NOT credit answers simply for using a 'key term' unless that is all that is required. (Check for evidence it is understood and not used wrongly.)
- e** DO NOT credit answers which are obviously self-contradicting or trying to cover all possibilities
- f** DO NOT give further credit for what is effectively repetition of a correct point already credited unless the language itself is being tested. This applies equally to 'mirror statements' (i.e. polluted/not polluted).
- g** DO NOT require spellings to be correct, unless this is part of the test. However spellings of syllabus terms must allow for clear and unambiguous separation from other syllabus terms with which they may be confused (e.g. Corrasion/Corrosion)

2 Presentation of mark scheme:

- Slashes (/) or the word 'or' separate alternative ways of making the same point.
- Semi colons (;) bullet points (•) or figures in brackets (1) separate different points.
- Content in the answer column in brackets is for examiner information/context to clarify the marking but is not required to earn the mark (except Accounting syllabuses where they indicate negative numbers).

3 Annotation:

- For point marking, ticks can be used to indicate correct answers and crosses can be used to indicate wrong answers. There is no direct relationship between ticks and marks. Ticks have no defined meaning for levels of response marking.
- For levels of response marking, the level awarded should be annotated on the script.
- Other annotations will be used by examiners as agreed during standardisation, and the meaning will be understood by all examiners who marked that paper.

Generic levels of response marking grids**Table A**

The table should be used to mark the 8 mark part (a) 'Describe' questions (2, 4, 6 and 8).

Level	Marks	Level descriptor
4	7–8	- Description is accurate, coherent and detailed and use of psychological terminology is accurate and comprehensive. - The answer demonstrates excellent understanding of the material and the answer is competently organised.
3	5–6	- Description is mainly accurate, reasonably coherent and reasonably detailed and use of psychological terminology is accurate but may not be comprehensive. - The answer demonstrates good understanding of the material and the answer has some organisation.
2	3–4	- Description is sometimes accurate and coherent but lacks detail and use of psychological terminology is adequate. - The answer demonstrates reasonable (sufficient) understanding but is lacking in organisation.
1	1–2	- Description is largely inaccurate, lacks both detail and coherence and the use of psychological terminology is limited. - The answer demonstrates limited understanding of the material and there is little, if any, organisation.
0	0	No response worthy of credit.

Table B The table should be used to mark the 10 mark part (b) 'Evaluate' questions (2, 4, 6 and 8).

Level	Marks	Level descriptor
4	9–10	• Evaluation is comprehensive and the range of issues covered is highly relevant to the question. • The answer demonstrates evidence of careful planning, organisation and selection of material. • There is effective use of appropriate supporting examples which are explicitly related to the question. • Analysis (valid conclusions that effectively summarise issues and arguments) is evident throughout. • The answer demonstrates an excellent understanding of the material.
3	7–8	• Evaluation is good. There is a range of evaluative issues. • There is good organisation of evaluative issues (rather than 'study by study'). • There is good use of supporting examples which are related to the question. • Analysis is often evident. • The answer demonstrates a good understanding of the material.
2	4–6	• Evaluation is mostly accurate but limited. Range of issues (which may or may not include the named issue) is limited. • The answer may only hint at issues but there is little organisation or clarity. • Supporting examples may not be entirely relevant to the question. • Analysis is limited. • The answer lacks detail and demonstrates a limited understanding of the material. NB If the named issue is not addressed, a maximum of 5 marks can be awarded. • If only the named issue is addressed, a maximum of 4 marks can be awarded.
1	1–3	• Evaluation is basic and the range of issues included is sparse. • There is little organisation and little, if any, use of supporting examples. • Analysis is limited or absent. • The answer demonstrates little understanding of the material.
0	0	• No response worthy of credit.

Psychology and abnormality

Question	Answer	Marks
1(a)	Explain what is meant by ‘systematic desensitisation’. Award 1 mark for a basic explanation of the term/concept. Award 2 marks for a detailed explanation of the term/concept. For example – Gradual exposure therapy.(1) The patient is taught relaxation techniques (1) and are gradually exposed to increasing levels of the object/situation they have a phobia of until their phobic reaction subsides. (1) Other appropriate responses should also be credited.	2
1(b)	Describe the cognitive explanation of phobias. Award 1–2 marks for a basic answer with some understanding of the topic area. Award 3–4 marks for a detailed answer with clear understanding of the topic area. For example – A phobia may develop due to irrational thoughts.(1) The person believes that the phobic object/situation as more dangerous or harmful than the object/situation really is.(1) Due to these thoughts, when the person sees the object they will have a strong fear reaction.(1) These irrational thoughts could have developed from a bad experience (e.g. being bitten by a dog) and the irrational belief that this is likely to happen again in the future.(1) Other appropriate responses should also be credited.	4

Question	Answer	Marks
1(c)	Explain <u>two</u> strengths of the cognitive explanation of phobias. Likely strengths include – • Backed up by evidence from the DiNardo study. DiNardo found that dog phobia was more common in people who had a fearful experience with a dog <i>and</i> also believed that this was likely to happen again in the future. This evidence supports the explanation as it shows how people with phobias will have irrational thoughts ('I will be bitten again by a dog') compared to those people who had the bad experience but did not believe it would happen again in the future. This increases the validity of the cognitive explanation of phobias. • DiNardo is supporting evidence. Credit strengths of this study (e.g. validity, in depth data from interview, etc.). Level 3 can only be awarded when the evaluation is clearly linked back to the explanation e.g. One strength of this explanation is that it is backed up by evidence from the DiNardo study which collected both quantitative and qualitative data. This data allowed comparisons to be made between the fearful and non-fearful participants as well as DiNardo collecting data on the dog experience and likelihood of a bad experience happening again. This adds to the validity of the cognitive explanation as the results which back up this explanation are highly detailed. • Practical applications – CBT is a useful application of this explanation. Can challenge the irrational thoughts the patient has of the phobic object or situation. Also shows that a traumatic experience in the past may have led to the irrational thoughts developing and the CBT therapist can discuss this with their client. • Somewhat holistic as this explanation takes into account both the experience of the phobic object/situation as well as the person's cognitions about the phobic object. The person thinks that there is a high likelihood that the bad experience they had will happen again in the future. Mark according to the levels of response criteria below: Level 3 (5–6 marks) • Candidates will show a clear understanding of the question and will explain two strengths. • Candidates will provide a good explanation with clear detail. Level 2 (3–4 marks) • Candidates will show an understanding of the question and will explain one appropriate strength in detail OR two strengths in less detail. Level 1 (1–2 marks) • Candidates will show a basic understanding of the question and will attempt an explanation of a strengths. They could include two strengths but just as an attempt. • Candidates will provide a limited explanation. Level 0 (0 marks) No response worthy of credit. Other appropriate responses should also be credited.	6

Question	Answer	Marks
2(a)	Describe the treatment and management of obsessive-compulsive and related disorders. Treatment and management of obsessive-compulsive and related disorders, including the following: • Biomedical (SSRIs) • Psychological: cognitive (Lovell et al., 2006), and exposure response prevention (Lehmkuhl et al., 2008) Biomedical (SSRIs) The main medications prescribed are selective serotonin reuptake inhibitors (SSRIs). These can help improve OCD symptoms by increasing the levels of a chemical called serotonin in the brain. This seems to then cause a lessening of anxiety experienced by the patient and therefore they do not need to engage in the OCD behaviours in order to relieve their anxiety (such as hand washing). Cognitive (Lovell et al., 2006) Study - Comparing telephone versus face-to-face treatment of CBT for OCD. 72 out-patients took part. 10 weekly sessions of exposure and response prevention therapy were given. 3 depression inventories given during therapy (Yale-Brown, Beck and client satisfaction). No significant differences found at six months. Concluded both face-to-face and telephone treatment are equally as effective in treating OCD. Credit can also be given for describing CBT therapy as it might be used to reduce OCD symptoms e.g. challenging the faulty thinking that hands need to be washed excessively in order to remove dirt and germs and keep the person safe from harm. Exposure response prevention (Lehmkuhl et al., 2008) Case study with a 12-year-old boy called Jason who had both autism and OCD. 10 50-minute sessions of CBT over 16 weeks. Used exposure response prevention – for example - Exposure – getting Jason to touch objects he has difficulties with such as elevator buttons, door handles, etc. Response prevention – reducing the anxious response to the objects by using coping statements. Jason does have high anxiety responses but he learns as therapy progresses that these reduce quickly within a few minutes. After therapy score on Y-BOCS dropped from 18 to 3. Mark according to the levels of response descriptors in Table A. Other appropriate responses should also be credited.	8

Question	Answer	Marks
2(b)	Evaluate the treatment and management of obsessive-compulsive and related disorders, including a discussion about determinism versus free-will. A range of issues could be used for evaluation here. These include: • Named issue – determinism/free will nature of the treatments e.g. biomedical is more deterministic as it suggests that the release of serotonin is what will reduce the OCD symptoms due to the reduction in anxiety and it is not down to anything the patient might do or think. However, it is the free will of the patient to take the SSRI. On the other hand, the psychological treatments suggest more free will as the patient can choose to go away and practice the tasks set by the therapist. They do, however, need the therapist's insight into their thoughts and behaviours which is somewhat more deterministic. • Validity • Application of psychology to everyday life (with reference to treatments). • Nature versus nurture debate with reference to the various treatments (via the approaches upon which they are based) • Comparisons of different treatments • Reductionist nature of the treatments • Appropriateness of treatments • Cost of treatments • Ethics of psychological treatments Mark according to the levels of response descriptors in Table B. Other appropriate responses should also be credited.	10

Psychology and consumer behaviour

Question	Answer	Marks
3(a)	Explain what is meant by ‘effective slogans’ in advertising. Award 1 mark for a basic explanation of the term/concept. Award 2 marks for a detailed explanation of the term/concept. For example: A striking/memorable phrase used in advertising. E.g. ‘Just Do It.’ What makes it effective is the consumer can link the slogan to the brand. E.g. ‘Just Do It’ is Nike. Response needs to identify what makes a slogan effective in order to achieve full marks. Other appropriate responses should also be credited.	2
3(b)	Describe the study by Fischer et al. (1991) on brand recognition in advertising. Award 1–2 marks for a basic answer with some understanding of the topic area. Award 3–4 marks for a detailed answer with clear understanding of the topic area. For example: 229 children from Georgia, USA attending pre-school were tested. (1) Matched logos with one of 23 products pictured on a game board. (1) 22 logos tested including children’s, adults’ and those of two cigarette brands (5 cigarette logos/types). (1) Found children had high rates of logo recognition. (1) Recognition rates were highest for the Disney Channel and Old Joe (cartoon character promoting Camel cigarettes). (1) Concluded that very young children see, understand and remember advertising. (1) Given serious health consequences of smoking exposure to tobacco advertising may represent a health risk. (1) Other appropriate responses should also be credited.	4

Question	Answer	Marks
3(c)	Discuss the use of children as participants in the study by Fischer et al. Points could include: + Can indicate issues regarding exposure of advertising of cigarettes to young children as the study found the children remembered this advertising. +/- can be ethical when the parents of children are asked for consent (and signed a consent form) and the study is not harmful. In this study, the participants played a game which is not harmful and the parents gave consent. Could be considered unethical as the children were shown tobacco brand logos, although this is just an image and the researchers were not trying to advertise cigarettes to the children. +/- Children can have low levels of concentration in psychological research, although Fischer et al. took this in account by having the children do a game for their study. +/- Language/communication issues. This was overcome in the Fischer et al. study as the children just had to do matching. But this does mean the children could not explain their responses. It may have been a lucky guess. – Can't generalise to adults. Although the children may recognise the brand it does not mean this recognition will continue into adulthood. Mark according to the levels of response criteria below: Level 3 (5–6 marks) • Candidates will show a clear understanding of the question and will discuss at least two points regarding children. • Candidates will provide a good explanation with clear detail. Level 2 (3–4 marks) • Candidates will show an understanding of the question and will discuss one point about children in detail or two or more in less detail. • Candidates will provide a good explanation. Level 1 (1–2 marks) • Candidates will show a basic understanding of the question and will attempt a discussion about children. • Candidates will provide a limited explanation. Level 0 (0 marks) No response worthy of credit. Other appropriate responses should also be credited.	6

Question	Answer	Marks
4(a)	Describe what psychologists have discovered about intuitive thinking and its imperfections in consumer decision-making (thinking fast and thinking slow, choice blindness, advertising and false memory). Intuitive thinking and its imperfections in consumer-decision making, including the following: • thinking fast and thinking slow/system 1 and system 2 (Shleifer, 2012) • choice blindness (Hall et al., 2010) • advertising and false memory (Braun-LaTour et al., 2004) Thinking fast and thinking slow/system 1 and system 2 (Shleifer, 2012) System 1 involves thinking fast. System 1 thinking is emotional, automatic, unconscious and effortless. Questions are answered quickly. This usually involves quick decision making for everyday products (e.g. milk and bread). System 2 involves thinking slow. System 2 thinking is calculating, conscious, slow, controlled, effortful and deliberate. This type of thinking is done by consumers buying more expensive items (such as a car or a house). Choice blindness (Hall et al., 2010) Took place in a supermarket in Sweden with 180 customers. Participants were asked to taste jam and tea to decide which they preferred out of a pair. Given jam/tea to taste (jam) or smell (tea) and rated it on a 1–10 scale. Given second taste/smell and the jam/tea has been switched to a different flavour/scent while the participant is distracted by one of the experimenters. They then tasted/smelled the item and rated on 10-point scale. Then asked which alternative they preferred and asked to sample a second time. Results – 33% of manipulated jam trials were detected (32% of tea). Detected more frequently in the least similar pairs for jam e.g. Cinnamon Apple vs Grapefruit-but not tea compared with the most similar pairs. Concluded there was considerable choice blindness. Advertising and false memory (Braun-LaTour et al., 2004) Study 1 - Lab study with 66 undergraduates assigned to either a truthful (shaking hands with Mickey Mouse) or a false advertisement condition (shaking hands with Bugs Bunny). Rated attitude, affect and likelihood of visiting Disneyland in the future. Also reported on memories of having visited Disneyland in the past. More participants remembered the false handshake as a true memory than the true handshake group. Post-event false information does influence memory. Study 2 – 100 participants were given information verbally, pictorially or both. The pictorial information group recalled more false information than the other two groups. Mark according to the levels of response descriptors in Table A. Other appropriate responses should also be credited.	8

Question	Answer	Marks
4(b)	Evaluate what psychologists have discovered about intuitive thinking and its imperfections in consumer decision-making (thinking fast and thinking slow, choice blindness, advertising and false memory), including a discussion of practical applications. A range of issues could be used for evaluation here. These include: • Named issue – Usefulness/practical applications – e.g. Thinking fast/slow could be useful to advertisers as they could identify which style is used for their product and make advertisements that appeal to the thinking style that the consumer uses. In addition, retailers could place items that use the thinking fast style near to the checkout and those that use thinking slow in a quieter area of the store. Retailers could ensure they have trained sales staff to assist customers with products that use thinking slow style. Hall et al.'s study also has good practical applications as it shows that consumers could be influenced by packaging. 'Value' products could be placed in packaging similar to branded products and this could attract more sales. Could argue the false memory study does not have a practical application as it is unlikely/illegal for advertisers to put false information into their advertisements. However, sales assistants could convince customers on a return visit that they had expressed a strong liking for a product when they last visited the store. • Strengths and weaknesses of the experimental method. • Sampling and generalisations • Ethics • Use of questionnaires/self-reports (strengths and weaknesses) Mark according to the levels of response descriptors in Table B. Other appropriate responses should also be credited.	10

Psychology and Health

Question	Answer	Marks
5(a)	Explain what is meant by ‘psychogenic pain’. Award 1 mark for a basic explanation of the term/concept. Award 2 marks for a detailed explanation of the term/concept. For example: Pain perceived by the body of a limb no longer present.(1) It is psychogenic as the pain is imagined by the mind. (1) Other appropriate responses should also be credited.	2
5(b)	Describe cognitive redefinition as a technique for managing pain. Award 1–2 marks for a basic answer with some understanding of the topic area. Award 3–4 marks for a detailed answer with clear understanding of the topic area. For example: Based on the theory that pain starts in the brain and therefore altering the patient’s thoughts about pain will change their perception of the pain. (1) It alters thinking to replace anxious thoughts about the pain with more positive thoughts. (1). For example, the patient could think that ‘this will only hurt a little bit’ rather than ‘this is the worst pain imaginable’. (1) Can also include redefining the pain as a different sensation such as pressure, warmth or cold. (1)	4

Question	Answer	Marks
5(c)	Explain <u>one</u> similarity and <u>one</u> difference between cognitive redefinition and biochemical techniques for managing pain. Similarities could include: • Both require professional (doctor to prescribe and psychologist to ‘teach’ cognitive redefinition) • Both have research support for their success. • Both have been shown to be effective in relieving pain. Cognitive redefinition relieves pain as it alters how the patient thinks about the pain and this leads to pain reduction. Medical techniques change the physiology within the body which lead to a reduction in pain. Differences could include: • Individual needs to be motivated (and of certain personality type/insight) for cognitive redefinition, whereas individual needs relatively little motivation to take drug. • Some drugs have side effects/addiction (e.g. nausea, vomiting, dizziness, dry mouth – opiates) No side effects with cognitive redefinition. • Patient more actively involved in cognitive redefinition but passive in drug therapy. • Cognitive redefinition takes time for the patient to learn the strategy and implement it, whereas medical techniques are faster acting. Mark according to the levels of response criteria below: Level 3 (5–6 marks) • Candidates will show a clear understanding of the question and will include one similarity and one difference. • Candidates will provide a good explanation with clear detail. Level 2 (3–4 marks) • Candidates will show an understanding of the question and will include one appropriate similarity in detail or one appropriate difference in detail. OR one similarity and one difference in less detail. • Candidates will provide a good explanation. Level 1 (1–2 marks) • Candidates will show a basic understanding of the question and will attempt a similarity and/or difference. This could include both but just as an attempt. • Candidates will provide a limited explanation. Level 0 (0 marks) No response worthy of credit. Other appropriate responses should also be credited	6

Question	Answer	Marks
6(a)	Describe what psychologists have discovered about measuring non-adherence to medical advice. Measuring non-adherence, including the following: • subjective: self-reports (Riekart and Droter, 1999) • objective: pill counting (Chung and Naya, 2000) • biochemical tests (Roth and Caron, 1978) • repeat prescriptions (Sherman et al., 2000) Subjective: self-reports (Riekart and Droter, 1999) Asking the patient if they are following their treatment programme. Study – Adolescents with diabetes for more than one year, aged 11–18 living with at least one parent, 94 families included, questionnaire, interview and medical data were used. Families divided into three groups – non-consenters (14), non-returns (28) and participants/returns (52). Found significant differences in adherence levels between participants and non-returns. Those who returned the questionnaire had higher adherence scores and tested blood sugar more frequently. Objective: pill counting (Chung and Naya, 2000) Counted by health professionals. There are also electronic measures such as TrackCap. Study – 57 Asthmatic patients (mix M and F) began initial screening of 3 weeks and 12 weeks of treatment during which they were told to take their medication twice a day. Given 3 weeks' worth of medication and instructed to return to clinic to collect more. TrackCap monitoring system device was issued with the tablets. On days when patients took exactly 2 tablets mean time between doses 12½ hours. 89% compliance was found – number of days two Trackcap uses at least 8 hours apart. On basis of tablet count compliance was 92%. Conclusion Trackcap is a convenient and effective medication monitoring system. Biochemical tests (Roth and Caron, 1978) Can be done via blood tests and urine samples. Study - 116 patients used. Intake of antacid regime was monitored. Although patients said their intake averaged 89%, found actual intake was 47%. Physician accuracy did not improve as they became more familiar with the patient. Pill counting was also found to be inaccurate. Therefore, it is very important for practitioners to use objective, quantitative tests to measure adherence to medical advice. Roth and Caron suggest urine and blood tests that are taken over a number of months will give a more accurate indication of adherence. Repeat prescriptions (Sherman et al., 2000) 116 children with persistent asthma. Interviews with parent/carer on clinic visit. Estimated adherence on a checklist. Followed up with a telephone call to the pharmacies the parent/carer said that they used. Information provided by the pharmacies was 92% accurate. Adherence was 72%, 61% and 38% for the three different inhalers prescribed to the children. Checking refills is an accurate way of measuring adherence. Also found doctors are not able to tell if patient is using their inhaler from consultation alone. Mark according to the levels of response descriptors in Table A. Other appropriate responses should also be credited.	8

Question	Answer	Marks
6(b)	Evaluate what psychologists have discovered about measuring non-adherence to medical advice, including a discussion about self-reports. A range of issues could be used for evaluation here. These include: Named issue – Self-reports Can evaluate both self-reports used in the research and/or the use of self-reports to measure non-adherence. Strengths include strengths of primary data, can find out what the patient/parent of patient thinks, weaknesses include issues with bias/social desirability. Although for many of the studies the purpose was to prove that self-reports do not create an accurate picture of non-adherence. Adherence and IDDM Questionnaire-R used in the Riekart and Droter study. Semi-structured interview assessing the adolescents' adherence to treatment. Also a demographics questionnaire was given to the parents of the participants. Sherman et al. – researcher interviewed the patient to find out the name of the pharmacy. Roth and Caron – patient was asked how often he took his antacids. Also asked how he measured his doses of medication. - Qualitative and quantitative measures with an evaluation of these measures - Subjective vs objective tests - Evidence to back up effectiveness of these tests (and evaluation of evidence) - Usefulness/practical applications - Cannot measure all non-adherence Mark according to the levels of response descriptors in Table B. Other appropriate responses should also be credited.	10

Psychology and organisations

Question	Answer	Marks
7(a)	McClelland proposed the theory of achievement motivation which included three types of needs. Identify <u>two</u> of these needs, other than the need for achievement. Award 1 mark for each need. Need for affiliation (1) Need for power (1) Other appropriate responses should also be credited.	2
7(b)	Describe how equity theory (Adams, 1963) explains motivation at work. Award 1–2 marks for a basic answer with some understanding of the topic area. Award 3–4 marks for a detailed answer with clear understanding of the topic area. For example: People consider what is fair in a relationship and assess their input into the relationship compared to the output from the relationship. (1) In terms of organisations an employer/employee judges the employees net worth to the company and if they are equal to other employees. (1) If the employee perceives they are putting in more than they are getting out in comparison to others at the same organisation they will not feel motivated. (1) However, if they feel they are putting in less than they are getting out in comparison to others they will feel motivated. (1) e.g. An employee works 50 hours a week compared to most employees working 40 hours per week for the same pay.(1) This employee will not be motivated.(1) Other appropriate responses should also be credited.	4

Question	Answer	Marks
7(c)	Explain <u>one</u> strength and <u>one</u> weakness of equity theory. Likely strengths include – • Equity theory also involves the free will of the employee as they are judging for themselves whether they feel their contribution is equivalent to the other employees in the company. • Adams does have applications as the employer can discuss with the employees what their perceptions are of their input and output and hope to make things fairer. • Reductionist nature of the theory makes it easier for employers to understand and therefore makes it more useful. Likely weaknesses include – • Not possible to make everything equal and also some employees may not recognise the input of others at the company if it is less tangible (e.g. the quality of the report rather than how long the report is). • The theory is describing motivation of people in general and was not specifically developed for organisations. • Reductionist/mechanistic nature of the theory. The theory suggests that employees are comparing the input and output and comparing it to others at the company. This is a view that sees employees like machines and assumes they make rational and conscious decisions in the workplace about their input and output. Many employees may be unaware of how they view their work compared to others at the same company. Mark according to the levels of response criteria below: Level 3 (5–6 marks) • Candidates will show a clear understanding of the question and will explain one strength and one weakness. • Candidates will provide a good explanation with clear detail. Level 2 (3–4 marks) • Candidates will show an understanding of the question and will explain one appropriate weakness in detail or one appropriate strength in detail. OR one weakness and one strength in less detail. Level 1 (1–2 marks) • Candidates will show a basic understanding of the question and will attempt an explanation of either a strength or a weakness. They could include both but just as an attempt. • Candidates will provide a limited explanation. Level 0 (0 marks) No response worthy of credit. Other appropriate responses should also be credited.	6

Question	Answer	Marks
8(a)	Describe what psychologists have discovered about leaders and followers in organisations (leader-member exchange model/ individualised leadership model, followership, measuring leadership). Leaders and followers, including the following: • Leader-member exchange model (Dansereau, 1994) and individualised leadership model (Dansereau, 1995) • Followership: qualities of and types (Kelley, 1988) • Measuring leadership: Leadership Practices Inventory (Kouzes and Posner, 1987) Leader-member exchange model (Dansereau, 1994) and individualised leadership model (Dansereau, 1995) Vertical Dyad Linkage theory – relationships develop through three stages. Role taking stages (where leaders and followers meet each other and leaders need to make their expectations clear), Role making stage (the team begins to work together), role routinisation (routines occur and high quality exchanges exist between leader and sub-ordinate; organisational environment can be improved at this stage). Also model suggests that leaders treat followers differently with respect to respect, trust and obligation. This leads to the creation of an in-group (those followers who are trusted) and an out-group (the followers in an organisation that the leader maintains a more formal relationship with). Individualised model – extends the theory focusing on one-to-one relationship between supervisor and subordinate and what each invests in the relationship as well as what they get out of it (their return). This can be a good relationship where the leader provides the employee a high level of support which improves the performance of the employee. It is very important that the leader develops the employee's feeling of self-worth and if this does not happen, although person may be the manager, the employee will not view them as their 'leader'. Successful leaders must vary the approach they take with each individual member of staff depending on their needs. This is why it is called 'individualised'. Followership: qualities of and types (Kelley, 1988) Qualities include: Self management – The ability to think for oneself and be able to work without close supervision. Commitment – Committed to the organisation and its goals. Competence – They are good at their job and focus on maximising their output. Courage – They are courageous, honest and have integrity. They maintain high standards even in face of dishonest or corrupt managers. They are independent and critical thinkers.	8

Question	Answer	Marks
8(a)	Types include – Sheep are passive and uncritical, lacking in initiative and sense of responsibility. Yes people – Dependent on the leader for inspiration. They are committed to the leader/organisation but are uncritical and conformist. Alienated followers – Critical and independent in their thinking but passive in carrying out their role. Survivors (pragmatics) – Adapt at surviving change. They are conservative in their views and will wait until the majority of the group support innovative ideas before giving their support. They hold the view of ‘better safe than sorry’. Effective followers (star followers) – Independent and think for themselves. Carry out their duties with energy and effectiveness. Measuring leadership: Leadership Practices Inventory (Kouzes and Posner, 1987) Measures extent to which a leader engages in the five practices of exemplary leadership. Six behavioural statements are given for each of these practices. E.g. model the way, inspire the shared vision, challenge the process, enable others to act, encourage the heart. 30 specific leadership behaviours are measured on a ten-point scale. (1 – almost never, 10 – almost always). Observers also do these ratings and this can be from manager, co-worker, etc. Total responses for each practice can range from 6–60 and the worker receives a score for each practice that they gave as well as the scores of the observers. Comparisons can be made between the employee/observer responses and over 1 million observer responses for other leaders who have taken the LPI. Finally, there are open-ended questions at the end of the inventory for the observer to answer. The leader is shown these in their final report. For example, ‘What would you like to see this leader do more of?’ Mark according to the levels of response descriptors in Table A. Other appropriate responses should also be credited.	

Question	Answer	Marks
8(b)	Evaluate what psychologists have discovered about leaders and followers in organisations (leader-member exchange model/ individualised leadership model, followership, measuring leadership), including a discussion on reductionism versus holism. A range of issues could be used for evaluation here. These include: • Named issue – Reductionism versus holism – Dansereau's theories are mainly holistic as they consider three stages of how leader/follower relationships develop. It was extended to examine the one-to-one relationship between leaders and followers. Kelley is also mainly holistic as it does consider followership qualities as well as the types of followers. However, it does theorise that followers are into one type and followers may be more than one types or be different types of followers with different managers. Finally, the LPI is mainly holistic as it has both qualitative and quantitative data that is collected. It is also collected from both the leader and some observers to get a comprehensive view of the leader's behaviour. There is also the opportunity to compare the scores with 1 million other leaders. They have also identified five practices that should be implemented by effective leaders which is more holistic. • Cultural bias of theories and inventory • Nature/nurture debate – e.g. Kouzes and Posner, 1987 suggests leadership is something that is learned rather than something a person is born with. • Deterministic nature of the theories • Reductionist nature of the theories/inventory • Individual vs situational • Evaluation of the Leadership Practices Inventory • Application to everyday life/usefulness Mark according to the levels of response descriptors in Table B. Other appropriate responses should also be credited.	10



Cambridge International AS & A Level

PSYCHOLOGY

9990/32

Paper 3 Specialist Options: Theory

May/June 2021

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.

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This document consists of **22** printed pages.

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.

**Social Science-Specific Marking Principles
(for point-based marking)****1 Components using point-based marking:**

- Point marking is often used to reward knowledge, understanding and application of skills. We give credit where the candidate's answer shows relevant knowledge, understanding and application of skills in answering the question. We do not give credit where the answer shows confusion.

From this it follows that we:

- a** DO credit answers which are worded differently from the mark scheme if they clearly convey the same meaning (unless the mark scheme requires a specific term)
- b** DO credit alternative answers/examples which are not written in the mark scheme if they are correct
- c** DO credit answers where candidates give more than one correct answer in one prompt/numbered/scaffolded space where extended writing is required rather than list-type answers. For example, questions that require *n* reasons (e.g. State two reasons ...).
- d** DO NOT credit answers simply for using a 'key term' unless that is all that is required. (Check for evidence it is understood and not used wrongly.)
- e** DO NOT credit answers which are obviously self-contradicting or trying to cover all possibilities
- f** DO NOT give further credit for what is effectively repetition of a correct point already credited unless the language itself is being tested. This applies equally to 'mirror statements' (i.e. polluted/not polluted).
- g** DO NOT require spellings to be correct, unless this is part of the test. However spellings of syllabus terms must allow for clear and unambiguous separation from other syllabus terms with which they may be confused (e.g. Corrasion/Corrosion)

2 Presentation of mark scheme:

- Slashes (/) or the word 'or' separate alternative ways of making the same point.
- Semi colons (;) bullet points (•) or figures in brackets (1) separate different points.
- Content in the answer column in brackets is for examiner information/context to clarify the marking but is not required to earn the mark (except Accounting syllabuses where they indicate negative numbers).

3 Annotation:

- For point marking, ticks can be used to indicate correct answers and crosses can be used to indicate wrong answers. There is no direct relationship between ticks and marks. Ticks have no defined meaning for levels of response marking.
- For levels of response marking, the level awarded should be annotated on the script.
- Other annotations will be used by examiners as agreed during standardisation, and the meaning will be understood by all examiners who marked that paper.

Generic levels of response marking grids**Table A**

The table should be used to mark the 8 mark part (a) 'Describe' questions (2, 4, 6 and 8).

Level	Marks	Level descriptor
4	7–8	- Description is accurate, coherent and detailed and use of psychological terminology is accurate and comprehensive. - The answer demonstrates excellent understanding of the material and the answer is competently organised.
3	5–6	- Description is mainly accurate, reasonably coherent and reasonably detailed and use of psychological terminology is accurate but may not be comprehensive. - The answer demonstrates good understanding of the material and the answer has some organisation.
2	3–4	- Description is sometimes accurate and coherent but lacks detail and use of psychological terminology is adequate. - The answer demonstrates reasonable (sufficient) understanding but is lacking in organisation.
1	1–2	- Description is largely inaccurate, lacks both detail and coherence and the use of psychological terminology is limited. - The answer demonstrates limited understanding of the material and there is little, if any, organisation.
0	0	No response worthy of credit.

Table B The table should be used to mark the 10 mark part (b) 'Evaluate' questions (2, 4, 6 and 8).

Level	Marks	Level descriptor
4	9–10	• Evaluation is comprehensive and the range of issues covered is highly relevant to the question. • The answer demonstrates evidence of careful planning, organisation and selection of material. • There is effective use of appropriate supporting examples which are explicitly related to the question. • Analysis (valid conclusions that effectively summarise issues and arguments) is evident throughout. • The answer demonstrates an excellent understanding of the material.
3	7–8	• Evaluation is good. There is a range of evaluative issues. • There is good organisation of evaluative issues (rather than 'study by study'). • There is good use of supporting examples which are related to the question. • Analysis is often evident. • The answer demonstrates a good understanding of the material.
2	4–6	• Evaluation is mostly accurate but limited. Range of issues (which may or may not include the named issue) is limited. • The answer may only hint at issues but there is little organisation or clarity. • Supporting examples may not be entirely relevant to the question. • Analysis is limited. • The answer lacks detail and demonstrates a limited understanding of the material. Note: If the named issue is not addressed, a maximum of 5 marks can be awarded. • If only the named issue is addressed, a maximum of 4 marks can be awarded.
1	1–3	• Evaluation is basic and the range of issues included is sparse. • There is little organisation and little, if any, use of supporting examples. • Analysis is limited or absent. • The answer demonstrates little understanding of the material.
0	0	• No response worthy of credit.

Psychology and abnormality

Question	Answer	Marks
1(a)	Explain what is meant by ‘bipolar’ disorder. Award 1 mark for a basic explanation of the term/concept. Award 2 marks for a detailed explanation of the term/concept. For example, Two strongly contrasting phases of mood. (1) Periods of severely elevated mood followed by periods of very low mood lasting for several weeks or months. (2) Other appropriate responses should also be credited.	2
1(b)	Describe cognitive restructuring (Beck, 1979) as a treatment for depression. Award 1–2 marks for a basic answer with some understanding of the topic area. Award 3–4 marks for a detailed answer with clear understanding of the topic area. For example, This is where the patient participates in a number of therapy sessions over weeks and/or months to alleviate their symptoms of depression. (1) As it is believed the depressive symptoms are due to faulty thinking the therapist will help the patient to identify their faulty thinking and then correct these thinking patterns to more helpful ways of viewing themselves, the world and the future.(1) Initially the patient and therapist will identify what the thinking patterns are and the patient will be helped to come up with alternative thoughts. (1) The patient then goes away between sessions and practices these alternative thoughts which should then lead to more helpful behaviours which will lead the patient to feel more hopeful and positive.(1) Other appropriate responses should also be credited.	4

Question	Answer	Marks
1(c)	Explain <u>one</u> strength and <u>one</u> weakness of cognitive restructuring as a treatment for depression. Likely strengths include – • Effectiveness of treatments – shown to be as effective as SSRIs for treating depression and give a toolkit for patients to use in the future if the depressive symptoms return. • Treatment does not have any side effects like medication and the patient has learned techniques to help with depression should they relapse in the future. • Can be inexpensive for the patient as could be offered for free in some countries • Fairly quick compared to other therapies as around 6–8 sessions. Psychotherapy can take over a year. • Empowering the patient – their free will is acknowledged and the patient is actively involved in their treatment. Likely weaknesses include – • Appropriateness of treatments as some patients will not want to discuss their personal problems with a therapist. OR some patients may be so severely depressed they cannot engage with the therapy. • Cost of treatment. Therapist's time must be paid for either by the patient or by the health service. Therapists can charge £50–100 for a 50 minute session. This could lead to the patient feeling more depressed if they suffer financial hardship paying for the treatment. • Time consuming. Takes 6–8 sessions but can be offered up to 12. Some therapists will have two weeks between treatments so it could take almost six months to finish the therapy. For someone who is very depressed and might engage in self-injurious behaviour waiting for the therapy to get to the point where it is helpful might be dangerous. • Lots of effort/motivation required from the patient. • Patients may feel uncomfortable discussing their problems and may not be completely honest about their thoughts and experiences. Mark according to the levels of response criteria below: Level 3 (5–6 marks) • Candidates will show a clear understanding of the question and will explain one strength and one weakness. • Candidates will provide a good explanation with clear detail. Level 2 (3–4 marks) • Candidates will show an understanding of the question and will explain one appropriate weakness in detail or one appropriate strength in detail. OR one weakness and one strength in less detail.	6

Question	Answer	Marks
1(c)	Level 1 (1–2 marks) • Candidates will show a basic understanding of the question and will attempt an explanation of either a strength or a weakness. They could include both but just as an attempt. • Candidates will provide a limited explanation. Level 0 (0 marks) No response worthy of credit. Other appropriate responses should also be credited.	

Question	Answer	Marks
2(a)	Describe the causes of impulse control disorders and non-substance addictive disorder. Causes of impulse control disorders and non-substance addictive disorder including the following – Biochemical: dopamine Behavioural: positive reinforcement Cognitive: feeling-state theory (Miller, 2010). Biochemical – dopamine The neurotransmitter dopamine has been linked to impulse control and addictive disorders. Dopamine's release is triggered by rewarding stimuli, such as engaging in pleasurable behaviours. So a pyromaniac will feel the reward of this 'happy chemical' when they start a fire. As the behaviour increases, levels of dopamine in striatum are reduced. This can lead to the perpetuation of the compulsions/addictions. Known as 'reward deficiency syndrome'. Behavioural – positive reinforcement Operant conditioning states that the frequency of a behaviour is increased by the use of a reward. For the gambler this can be money (for the kleptomaniac and pyromaniac the thrill associated with their behaviours). Positive reinforcement explains gambling well by the use of schedules of reinforcement with the use of partial positive reinforcement (a reward is not received every time). Gambler is compelled to continue because they 'might' win the next time. Cognitive – feeling-state theory (Miller, 2010) Intense positive feelings link with specific behaviours such as gambling. Impulse control disorders are caused because these links form a 'state-dependent memory' (feeling state). The intense feeling-state experienced is all the emotions, thoughts and physiological arousal, and this leads to impulse-control problems and obsessions. The individual with negative thoughts about themselves can experience an intense feeling of euphoria and power when they indulge in their impulsive behaviour, overcoming that negative thought to a great extent. Mark according to the levels of response descriptors in Table A. Other appropriate responses should also be credited.	8

Question	Answer	Marks
2(b)	Evaluate the causes of impulse control disorders and non-substance addictive disorder, including a discussion about nature versus nurture. A range of issues could be used for evaluation here. These include: • Named issue – nature versus nurture – Behavioural is due to nurture as the person with impulse control disorder learns the disorder through rewards, Biological – dopamine could be due to nature (person is born with a stronger dopamine response) or nurture (patient learns the behaviour due to the dopamine release). Feeling state is mainly nurture as the patient develops the feeling state due to their experiences of the behaviour they have developed impulsive behaviour around (e.g. gambling) Example analysis – If something is due to nature the person cannot alter this so therefore it could be argued the behaviour cannot be changed. However, modern medicine has created medications that alter our biochemistry. If something is due to nurture then the environment can be improved so that the rewarding experiences no longer happen (e.g. gambling websites could be prevented from giving such high maximum payments) and therefore the behaviour could either not be learned in the first place or someone being treated might find it easier to stop doing their impulsive behaviour. • Deterministic nature of the causes • Practical applications • Evaluation of evidence of causes • Generalisability of the explanation to all types of impulse control disorders and non-substances. Mark according to the levels of response descriptors in Table B. Other appropriate responses should also be credited.	10

Psychology and consumer behaviour

Question	Answer	Marks
3(a)	Explain what is meant by the ‘cognition-emotion model’ of the effects of ambience. Award 1 mark for a basic explanation of the term/concept. Award 2 marks for a detailed explanation of the term/concept. For example: Zajonc & Markus (1984) propose emotion can be generated by biological, sensory, and cognitive events.(1) So cognition may produce emotion but does not necessarily cause emotion. (1) Therefore, the ambience of a retail environment/shop can produce cognitions that lead to emotions in the consumer. (1) For example, a light colour may produce the cognition of ‘expensive’ which make the consumer feel good when they purchase a product.(1) Other appropriate responses should also be credited.	2
3(b)	Describe the study by Chebat and Michon (2003) on the effects of odour on shopper arousal and emotion. Award 1–2 marks for a basic answer with some understanding of the topic area. Award 3–4 marks for a detailed answer with clear understanding of the topic area. For example: Field experiment in a shopping mall in Canada over two weeks. (1) Week 1 was a control week/group where no scent was put into the mall. In the second week a pleasing scent (citrus) was put into the mall’s main corridor.(1) 145 participants during the scent week (447 in the control week). (1) Self-administered questionnaire given to participants by graduate marketing students not wearing any perfume. (1) This questionnaire asked the participants about their shopping trip on product quality, the shopping environment, and the pleasure and arousal felt while shopping.(1) Found a more favourable perception of the product quality and shopping environment was reported.(1) Other appropriate responses should also be credited.	4

Question	Answer	Marks
3(c)	Explain <u>two</u> strengths of the study by Chebat and Michon. Likely strengths include – • Good ecological validity as takes place in a shopping mall and some shops/malls do have a scent so this is a realistic situation that the customers are experiencing. They are also going about their normal shopping and do not know they are in a study until questioned at the end. • Quantitative data collected about product quality, shopping environment, pleasure and arousal so comparisons can be made between the control and experimental groups. • Control of variables (levels of citrus smell) – 10 diffusers released a citrus scent every 3 seconds for 10 minutes. • Reliability – the same questionnaire was used with all participants, all of the graduate marketing students did not wear any perfume, etc. • Ethical – got consent from customers who completed the questionnaire. Mark according to the levels of response criteria below: Level 3 (5–6 marks) • Candidates will show a clear understanding of the question and will explain two strengths. • Candidates will provide a good explanation with clear detail. Level 2 (3–4 marks) • Candidates will show an understanding of the question and will explain one appropriate strength in detail. OR two strengths in less detail. Level 1 (1–2 marks) • Candidates will show a basic understanding of the question and will attempt an explanation of a strength. They could include two strengths but just as an attempt. • Candidates will provide a limited explanation. Level 0 (0 marks) No response worthy of credit. Other appropriate responses should also be credited	6

Question	Answer	Marks
4(a)	Describe what psychologists have discovered about menu design psychology. Menu design psychology, including the following: • eye movement patterns, framing and common menu mistakes (Pavesic, 2005) • primacy, recency and menu item position (Dayan and Bar-Hillel, 2011) • sensory perception and food name (Wansink et al., 2005) Eye movement patterns, framing and common menu mistakes (Pavesic, 2005) A review article that outlines how customers use menus and how restaurants can design better menus (use of ‘eye magnets’) such as a box around the appetiser or different coloured font to a menu description. Common menu mistakes such as hard to read and overemphasising pricing also discussed. Average time spent looking at a menu 109 seconds. Primacy, recency and menu item position (Dayan and Bar-Hillel, 2011) Two studies – study 1 – 240 Hebrew students given four different pizza menu designs. Found selected items at extremes (top/bottom) rather than in the middle but no primacy-recency effect found. Study 2 was a field experiment over 30 days and confirmed the findings with items being selected more frequently if they were on the beginning or end of the category options. Suggested putting healthier items at the top and bottom of the menu and less healthy items in the middle. Sensory perception and food name (Wansink et al., 2005) 6 week experiment in a cafeteria with 140 customers. Foods with descriptive and evocative names had more positive comments (such as ‘Succulent Italian Seafood Fillet’) and rated as more appealing, tasty and caloric than those with more regular names (e.g. ‘Seafood Fillet’). Open ended comments revealed more favourable comments about the product when the descriptive label was used compared to the regular label. The researchers concluded, the use of descriptive names may help improve perceptions of foods in institutional settings, and it may help facilitate the introduction of unfamiliar foods. Mark according to the levels of response descriptors in Table A. Other appropriate responses should also be credited.	8

Question	Answer	Marks
4(b)	Evaluate what psychologists have discovered about menu design psychology, including a discussion about ecological validity. • Named issue – ecological validity – The study by Wansink does have good ecological validity as it was done in a realistic environment of a cafeteria in America. The menu design conditions were very realistic and these types of menus do exist in restaurants. In addition, these participants did not know they were in a study so would have made more natural choices. In contrast, the study by Dayan has lower ecological validity as it was a lab experiment and although the participants were making real choices from realistic menus, it was not, in fact, to really purchase and eat any of the food. The participants in this study may have taken the choices less seriously and also responded to the unrealistic lab environment which would lower the validity of the study. They did, however, then go onto to replicate the results in the real restaurant which shows higher ecological validity. • Strengths and weaknesses of the methods used in research • Generalisations including cultural bias • Usefulness/practical applications • Ethics of the two studies • Deterministic nature of the theories about menu design psychology • Reductionist nature of the theories about menu design psychology Mark according to the levels of response descriptors in Table B. Other appropriate responses should also be credited.	10

Psychology and health

Question	Answer	Marks
5(a)	Outline how <u>one</u> biochemical technique reduces stress. Award 1 mark for a basic explanation of the term/concept. Award 2 marks for a detailed explanation of the term/concept. For example: Antidepressants (SSRIs) such as fluoxetine (Prozac). Regulates serotonin (mood stabiliser) in the brain to reduce stress levels. OR Benzodiazepines (BZs) – Benzodiazepines act as a sedative which slows down the body's functions. The main effects of benzodiazepines are: sedation, reduced anxiety and muscle relaxation. OR Betablockers – these reduce blood pressure by blocking the effects of epinephrine/adrenaline. Therefore the person's heart beats more slowly and as a result they will experience less stress. 1 mark for identifying the drug and 1 mark for outline of how it reduces stress. Other appropriate responses should also be credited.	2
5(b)	Describe the study by Chandola et al. (2008) on work as a cause of stress. Award 1–2 marks for a basic answer with some understanding of the topic area. Award 3–4 marks for a detailed answer with clear understanding of the topic area. For example 10,308 London male and female civil servants. (1) Questionnaire and clinical data collected. (1) Chronic work stress was associated with CHD and stronger amongst participants aged under 50. (1) 32% of the effect of work stress on CHD attributed to its effect on health behaviour and the metabolic syndrome. (1)	4

Question	Answer	Marks
5(c)	Discuss the generalisability of the study by Chandola et al. Points could include • Large sample size makes it more generalisable (10,308) • Just civil servants, limits generalisability to office workers • Good generalisability to everyday life as measures taken are typical of what might be used during a visit to the doctor (e.g. heart rate), however completing a questionnaire on stress could be argued as atypical of everyday life (or typical as many patients complete questionnaires on stress at work or at the doctors) • Good age range (35–55) although could be argued that it is not generalisable to younger participants or the very old (the eldest participant would have been 74 years old at the end of the longitudinal study in 2004). • All participants are from London so could be argued to be ethnocentric. Mark according to the levels of response criteria below: Level 3 (5–6 marks) • Candidates will show a clear understanding of the question and will discuss at least two points regarding generalisability. • Candidates will provide a good explanation with clear detail. Level 2 (3–4 marks) • Candidates will show an understanding of the question and will discuss one point about generalisability in detail or two or more in less detail. • Candidates will provide a good explanation. Level 1 (1–2 marks) • Candidates will show a basic understanding of the question and will attempt a discussion about generalisability. • Candidates will provide a limited explanation. Level 0 (0 marks) No response worthy of credit. Other appropriate responses should also be credited.	6

Question	Answer	Marks
6(a)	Describe what psychologists have discovered about strategies for promoting health. Strategies for promoting health, including the following • fear arousal (Janis and Feshbach, 1953; Cowpe, 1989) • Yale model of communication • providing information (Lewin, 1992) Fear arousal – Janis and Feshbach, 1953 Independent groups design experiment using 200 High School students (mean age 15 years) each exposed to lecture and administration of questionnaire to record emotional reactions 3 times. Group 1 (50) – High Fear Arousal Group – given lecture on dental hygiene and its effects including slides showing diseased mouths and explanation of diseases including cancer and consequences. Group 2 (50) – Moderate Fear Arousal Group – given similar lecture as group one and similar picture but less disturbing. Group 3 (50) – Minimal Fear Arousal Group – Lecture about teeth and cavities, without pictures or consequences. Control group (50) – given lecture about the structure of the human eye. Questionnaire given one week before lecture, after lecture and one week after lecture to gauge emotional reaction and level of conformity. Minimal fear arousal most effective in encouraging students to adopt the oral hygiene recommendations. Fear arousal – Cowpe, 1989 Aim was to test effectiveness of advertising campaign. Two 60 second adverts made showing the cause of chip pan fires (overfilling and inattentance). Shown in ten UK regions between 1976–1984. 12% drop in fires and high levels of awareness of the dangers of chip pan fires reported. Yale model of communication The source/the communicator – who is giving the message; are they credible, trustworthy? If a trustworthy person such as a doctor or scientist is giving the information to the person this is more likely to bring about behaviour change. The message/the communication/the context – is it clear and direct, one or two sided, vivid and colourful? If is the clear and attention-grabbing health message the person is more likely to pay attention to it (and this could then bring about change in their health behaviour) The medium – radio, TV, print, one-to-one, personal. This depends on the target audience. Health promotion aimed at young people could be best place on social media whereas older people might be better on TV or in the newspaper. The target/the audience – Who is the message aimed at? Is the audience sympathetic, knowledgeable? If the audience is not knowledgeable it is best to keep the message simple or show images (such as with a stopping smoking campaign that shows images of the damage caused by smoking).	8

Question	Answer	Marks
6(a)	The situation – where will the message be received, home, cinema, doctors? Where are the people most likely to be receptive to the health promotion message? Is it when they feel relaxed at home or when they are thinking about their health behaviour, e.g. at the doctor's surgery. The candidate might also consider the stages of the process (e.g. attention, comprehension and acceptance/reaction). Providing information – Lewin, 1992 – (not 2002) 176 patients who recently suffered a heart attack were randomly allocated to either 1) self-help rehab programme 2) standard care plus a placebo package of information and informal counselling. Psychological adjustments better in the rehab group at one year. Significantly fewer appointments with GPs and fewer readmitted to hospital in first six months. Mark according to the levels of response descriptors in Table A. Other appropriate responses should also be credited.	
6(b)	Evaluate what psychologists have discovered about strategies for promoting health, including a discussion of the longitudinal research method. A range of issues could be used for evaluation here. These include: • Named issue – Longitudinal – Strengths include that it shows change in behaviour over time, often can get more detail due to the length of time spent with participants. Weaknesses include that it involves a lot of commitment/time/cost of the psychologist and their university/funding body and participant attrition. Cowpe study took place over from 1976–1984. Lewin 1992 – over six months, Lewin 2002 – over 13 months. Likely to argue that Janis and Feshbeck is snapshot as just over a week so cannot measure long term changes in behaviour. • Usefulness • Generalisability of the samples used in the studies. • Qualitative and quantitative data collection methods • Ecological validity of the studies. • Holistic nature of Yale Model of Communication • Individual vs situational explanations Mark according to the levels of response descriptors in Table B. Other appropriate responses should also be credited.	10

Psychology and organisations

Question	Answer	Marks
7(a)	Explain what is meant by ‘empowerment’ as a motivator at work. Award 1 mark for a basic explanation of the term/concept. Award 2 marks for a detailed explanation of the term/concept. For example: The employee is given some autonomy to work independently in their job.(1) Due to feeling trusted to complete the work, the employee will feel more motivated to work hard and complete the job to a high standard. (1) Other appropriate responses should also be credited.	2
7(b)	Describe how ERG theory (Alderfer, 1972) explains motivation at work. Award 1–2 marks for a basic answer with some understanding of the topic area. Award 3–4 marks for a detailed answer with clear understanding of the topic area. For example: Three needs identified – existence, relatedness and growth. Existence are the survival needs – physiological and safety. At work this could be met via providing healthy meals and having a bullying policy so the employee feels healthy/safe and will feel motivated as these needs have been met. Relatedness – social and self-esteem needs. This could be met at work by providing praising staff and having work social events so the employee feels good about their work and will likely work harder. Growth – self-development and advancement. Provided at work via clear progression/development so the employee feels that hard work will lead to a better job and are therefore motivated. Other appropriate responses should also be credited.	4

Question	Answer	Marks
7(c)	Explain <u>one</u> strength and <u>one</u> weakness of ERG theory. Likely strengths include – • Good practical applications as the theory suggests the needs of workers and therefore employers can meet these needs. For example, they can provide regular feedback on work, provide healthy food in the staff catering facilities, take action on complaints from staff to do with bullying, etc. • Increased productivity/motivation of workers by meeting needs leading to higher profits. • Some needs are inexpensive to meet (e.g. praising workers). • Not a hierarchical theory – therefore the 3 needs are considered of equal importance. Likely weaknesses include – • Difficult for the employer to know if these needs are being met outside of work. E.g. difficult to know the level of need required – is an employee having their development needs met via charity work they do outside of work • Temporal validity as the theory was developed in 1972 and the world of work has changed considerably since the early 70s. For example, in some countries there is more part-time work and people change jobs more frequently. • May be difficult to apply this theory across all types of jobs (factory workers compared to the Director of a company) and all types of business (manufacturing compared to a marketing company). Small businesses may not be able to give their workers the opportunity to get promoted. • Some needs are expensive to meet (e.g. providing meals) Mark according to the levels of response criteria below: Level 3 (5–6 marks) • Candidates will show a clear understanding of the question and will discuss one strength and one weakness. • Candidates will provide a good explanation with clear detail. Level 2 (3–4 marks) • Candidates will show an understanding of the question and will discuss one appropriate weakness in detail or one appropriate strength in detail. OR one weakness and one strength in less detail. Level 1 (1–2 marks) • Candidates will show a basic understanding of the question and will attempt a discussion of either a strength or a weakness. They could include both but just as an attempt. • Candidates will provide a limited explanation. Level 0 (0 marks) No response worthy of credit. Other appropriate responses should also be credited.	6

Question	Answer	Marks
8(a)	Describe what psychologists have discovered about physical and psychological work conditions in organisations. Physical and psychological work conditions in organisations, including the following: • Physical: the Hawthorne studies (Wikstrom and Bendix, 2000) • Psychological: bullying at work (Einarsen, 1999) • Open plan offices (Oldham and Brass, 1979) Hawthorne studies (Wikstrom and Bendix, 2000) – This study reviews the Hawthorne studies conducted in the 1920s. The original was done at the Hawthorne Plant in Chicago to test the effect of changes in the environment on productivity. Researchers changed many aspects of the working environment (e.g. lighting and work structures) but found regardless of what they did the productivity increased in both the experimental group where changes were made as well as a control group which had no changes. It was concluded that it could be due to the special privileges received by those involved in the study as well as the improved relationships the workers formed with each other and management. They also found that further research has not replicated these findings and this could be due to a number of factors including that the workers in the Hawthorne Plant may have received higher income, positive attention from their work, etc. Bullying at work (Einarsen, 1999) This is a review article of many pieces of previous research. A summary of these pieces of research can also be given credit. Four stages are also identified in the article including – aggressive behaviour, bullying, stigmatisation and finally severe trauma. Five types of bullying behaviour identified – physical, verbal, social isolation, personal attack (e.g. ridicule/gossip), work-related (e.g. making tasks harder to perform) Open plan offices (Oldham and Brass, 1979) Employees of a newspaper in the Midwest, USA. 123 participants. 76 in experimental group who experienced all three waves of the move to the open plan office design. 5 were a control group (office design did not change) and 26 experienced two of the waves. Three questionnaire items were used to measure each of the following job characteristics: autonomy, skill variety, task identity, task significance, and task feedback. Also asked questions about how easy it was to interact with others, perception of conflict, concentration, etc. Found employees' internal motivation and satisfaction with work and colleagues decreased after the move to the open plan office. Found it difficult to concentrate/complete tasks. Mark according to the levels of response descriptors in Table A. Other appropriate responses should also be credited.	8

Question	Answer	Marks
8(b)	Evaluate what psychologists have discovered about physical and psychological work conditions in organisations, including a discussion about validity. A range of issues could be used for evaluation here. These include: • Named issue – validity – e.g. temporal validity due to the studies being developed a long time ago 1920s, 1979, 1999. Population validity (Hawthorne studies in a factory, Oldham and Brass in a newspaper in Midwest USA). Validity of measures (e.g. quantitative data collected from self-reports in Oldham and Brass which allow comparisons but might lack validity due to social desirability). Good ecological validity in the studies as they are investigating employees in their normal jobs. However, the Hawthorne studies did put the workers into a separate part of the factory when they were doing the study and some argue that this attention that these workers received could have led to the increases in productivity. • Individual and situational explanations • Any research methods issues that are applied to the Hawthorne study and/or Oldham and Brass study (e.g. generalisability, ecological validity, type of data) • Reductionist or holistic nature of explanations. • Deterministic nature of the conclusions. • Usefulness/application to everyday life. Mark according to the levels of response descriptors in Table B. Other appropriate responses should also be credited.	10



Cambridge International AS & A Level

PSYCHOLOGY

9990/33

Paper 3 Specialist Options: Theory

May/June 2021

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 May/June 2021 series for most Cambridge IGCSE™, Cambridge International A and AS Level components and some Cambridge O Level components.

This document consists of **22** printed pages.

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.

**Social Science-Specific Marking Principles
(for point-based marking)****1 Components using point-based marking:**

- Point marking is often used to reward knowledge, understanding and application of skills. We give credit where the candidate's answer shows relevant knowledge, understanding and application of skills in answering the question. We do not give credit where the answer shows confusion.

From this it follows that we:

- a** DO credit answers which are worded differently from the mark scheme if they clearly convey the same meaning (unless the mark scheme requires a specific term)
- b** DO credit alternative answers/examples which are not written in the mark scheme if they are correct
- c** DO credit answers where candidates give more than one correct answer in one prompt/numbered/scaffolded space where extended writing is required rather than list-type answers. For example, questions that require *n* reasons (e.g. State two reasons ...).
- d** DO NOT credit answers simply for using a 'key term' unless that is all that is required. (Check for evidence it is understood and not used wrongly.)
- e** DO NOT credit answers which are obviously self-contradicting or trying to cover all possibilities
- f** DO NOT give further credit for what is effectively repetition of a correct point already credited unless the language itself is being tested. This applies equally to 'mirror statements' (i.e. polluted/not polluted).
- g** DO NOT require spellings to be correct, unless this is part of the test. However spellings of syllabus terms must allow for clear and unambiguous separation from other syllabus terms with which they may be confused (e.g. Corrasion/Corrosion)

2 Presentation of mark scheme:

- Slashes (/) or the word 'or' separate alternative ways of making the same point.
- Semi colons (;) bullet points (•) or figures in brackets (1) separate different points.
- Content in the answer column in brackets is for examiner information/context to clarify the marking but is not required to earn the mark (except Accounting syllabuses where they indicate negative numbers).

3 Annotation:

- For point marking, ticks can be used to indicate correct answers and crosses can be used to indicate wrong answers. There is no direct relationship between ticks and marks. Ticks have no defined meaning for levels of response marking.
- For levels of response marking, the level awarded should be annotated on the script.
- Other annotations will be used by examiners as agreed during standardisation, and the meaning will be understood by all examiners who marked that paper.

Generic levels of response marking grids**Table A**

The table should be used to mark the 8 mark part (a) 'Describe' questions (2, 4, 6 and 8).

Level	Marks	Level descriptor
4	7–8	- Description is accurate, coherent and detailed and use of psychological terminology is accurate and comprehensive. - The answer demonstrates excellent understanding of the material and the answer is competently organised.
3	5–6	- Description is mainly accurate, reasonably coherent and reasonably detailed and use of psychological terminology is accurate but may not be comprehensive. - The answer demonstrates good understanding of the material and the answer has some organisation.
2	3–4	- Description is sometimes accurate and coherent but lacks detail and use of psychological terminology is adequate. - The answer demonstrates reasonable (sufficient) understanding but is lacking in organisation.
1	1–2	- Description is largely inaccurate, lacks both detail and coherence and the use of psychological terminology is limited. - The answer demonstrates limited understanding of the material and there is little, if any, organisation.
0	0	No response worthy of credit.

Table B The table should be used to mark the 10 mark part (b) 'Evaluate' questions (2, 4, 6 and 8).

Level	Marks	Level descriptor
4	9–10	• Evaluation is comprehensive and the range of issues covered is highly relevant to the question. • The answer demonstrates evidence of careful planning, organisation and selection of material. • There is effective use of appropriate supporting examples which are explicitly related to the question. • Analysis (valid conclusions that effectively summarise issues and arguments) is evident throughout. • The answer demonstrates an excellent understanding of the material.
3	7–8	• Evaluation is good. There is a range of evaluative issues. • There is good organisation of evaluative issues (rather than 'study by study'). • There is good use of supporting examples which are related to the question. • Analysis is often evident. • The answer demonstrates a good understanding of the material.
2	4–6	• Evaluation is mostly accurate but limited. Range of issues (which may or may not include the named issue) is limited. • The answer may only hint at issues but there is little organisation or clarity. • Supporting examples may not be entirely relevant to the question. • Analysis is limited. • The answer lacks detail and demonstrates a limited understanding of the material. NB If the named issue is not addressed, a maximum of 5 marks can be awarded. • If only the named issue is addressed, a maximum of 4 marks can be awarded.
1	1–3	• Evaluation is basic and the range of issues included is sparse. • There is little organisation and little, if any, use of supporting examples. • Analysis is limited or absent. • The answer demonstrates little understanding of the material.
0	0	• No response worthy of credit.

Psychology and abnormality

Question	Answer	Marks
1(a)	Explain what is meant by ‘systematic desensitisation’. Award 1 mark for a basic explanation of the term/concept. Award 2 marks for a detailed explanation of the term/concept. For example – Gradual exposure therapy.(1) The patient is taught relaxation techniques (1) and are gradually exposed to increasing levels of the object/situation they have a phobia of until their phobic reaction subsides. (1) Other appropriate responses should also be credited.	2
1(b)	Describe the cognitive explanation of phobias. Award 1–2 marks for a basic answer with some understanding of the topic area. Award 3–4 marks for a detailed answer with clear understanding of the topic area. For example – A phobia may develop due to irrational thoughts.(1) The person believes that the phobic object/situation as more dangerous or harmful than the object/situation really is.(1) Due to these thoughts, when the person sees the object they will have a strong fear reaction.(1) These irrational thoughts could have developed from a bad experience (e.g. being bitten by a dog) and the irrational belief that this is likely to happen again in the future.(1) Other appropriate responses should also be credited.	4

Question	Answer	Marks
1(c)	Explain <u>two</u> strengths of the cognitive explanation of phobias. Likely strengths include – • Backed up by evidence from the DiNardo study. DiNardo found that dog phobia was more common in people who had a fearful experience with a dog <i>and</i> also believed that this was likely to happen again in the future. This evidence supports the explanation as it shows how people with phobias will have irrational thoughts ('I will be bitten again by a dog') compared to those people who had the bad experience but did not believe it would happen again in the future. This increases the validity of the cognitive explanation of phobias. • DiNardo is supporting evidence. Credit strengths of this study (e.g. validity, in depth data from interview, etc.). Level 3 can only be awarded when the evaluation is clearly linked back to the explanation e.g. One strength of this explanation is that it is backed up by evidence from the DiNardo study which collected both quantitative and qualitative data. This data allowed comparisons to be made between the fearful and non-fearful participants as well as DiNardo collecting data on the dog experience and likelihood of a bad experience happening again. This adds to the validity of the cognitive explanation as the results which back up this explanation are highly detailed. • Practical applications – CBT is a useful application of this explanation. Can challenge the irrational thoughts the patient has of the phobic object or situation. Also shows that a traumatic experience in the past may have led to the irrational thoughts developing and the CBT therapist can discuss this with their client. • Somewhat holistic as this explanation takes into account both the experience of the phobic object/situation as well as the person's cognitions about the phobic object. The person thinks that there is a high likelihood that the bad experience they had will happen again in the future. Mark according to the levels of response criteria below: Level 3 (5–6 marks) • Candidates will show a clear understanding of the question and will explain two strengths. • Candidates will provide a good explanation with clear detail. Level 2 (3–4 marks) • Candidates will show an understanding of the question and will explain one appropriate strength in detail OR two strengths in less detail. Level 1 (1–2 marks) • Candidates will show a basic understanding of the question and will attempt an explanation of a strengths. They could include two strengths but just as an attempt. • Candidates will provide a limited explanation. Level 0 (0 marks) No response worthy of credit. Other appropriate responses should also be credited.	6

Question	Answer	Marks
2(a)	Describe the treatment and management of obsessive-compulsive and related disorders. Treatment and management of obsessive-compulsive and related disorders, including the following: • Biomedical (SSRIs) • Psychological: cognitive (Lovell et al., 2006), and exposure response prevention (Lehmkuhl et al., 2008) Biomedical (SSRIs) The main medications prescribed are selective serotonin reuptake inhibitors (SSRIs). These can help improve OCD symptoms by increasing the levels of a chemical called serotonin in the brain. This seems to then cause a lessening of anxiety experienced by the patient and therefore they do not need to engage in the OCD behaviours in order to relieve their anxiety (such as hand washing). Cognitive (Lovell et al., 2006) Study - Comparing telephone versus face-to-face treatment of CBT for OCD. 72 out-patients took part. 10 weekly sessions of exposure and response prevention therapy were given. 3 depression inventories given during therapy (Yale-Brown, Beck and client satisfaction). No significant differences found at six months. Concluded both face-to-face and telephone treatment are equally as effective in treating OCD. Credit can also be given for describing CBT therapy as it might be used to reduce OCD symptoms e.g. challenging the faulty thinking that hands need to be washed excessively in order to remove dirt and germs and keep the person safe from harm. Exposure response prevention (Lehmkuhl et al., 2008) Case study with a 12-year-old boy called Jason who had both autism and OCD. 10 50-minute sessions of CBT over 16 weeks. Used exposure response prevention – for example - Exposure – getting Jason to touch objects he has difficulties with such as elevator buttons, door handles, etc. Response prevention – reducing the anxious response to the objects by using coping statements. Jason does have high anxiety responses but he learns as therapy progresses that these reduce quickly within a few minutes. After therapy score on Y-BOCS dropped from 18 to 3. Mark according to the levels of response descriptors in Table A. Other appropriate responses should also be credited.	8

Question	Answer	Marks
2(b)	Evaluate the treatment and management of obsessive-compulsive and related disorders, including a discussion about determinism versus free-will. A range of issues could be used for evaluation here. These include: • Named issue – determinism/free will nature of the treatments e.g. biomedical is more deterministic as it suggests that the release of serotonin is what will reduce the OCD symptoms due to the reduction in anxiety and it is not down to anything the patient might do or think. However, it is the free will of the patient to take the SSRI. On the other hand, the psychological treatments suggest more free will as the patient can choose to go away and practice the tasks set by the therapist. They do, however, need the therapist's insight into their thoughts and behaviours which is somewhat more deterministic. • Validity • Application of psychology to everyday life (with reference to treatments). • Nature versus nurture debate with reference to the various treatments (via the approaches upon which they are based) • Comparisons of different treatments • Reductionist nature of the treatments • Appropriateness of treatments • Cost of treatments • Ethics of psychological treatments Mark according to the levels of response descriptors in Table B. Other appropriate responses should also be credited.	10

Psychology and consumer behaviour

Question	Answer	Marks
3(a)	Explain what is meant by ‘effective slogans’ in advertising. Award 1 mark for a basic explanation of the term/concept. Award 2 marks for a detailed explanation of the term/concept. For example: A striking/memorable phrase used in advertising. E.g. ‘Just Do It.’ What makes it effective is the consumer can link the slogan to the brand. E.g. ‘Just Do It’ is Nike. Response needs to identify what makes a slogan effective in order to achieve full marks. Other appropriate responses should also be credited.	2
3(b)	Describe the study by Fischer et al. (1991) on brand recognition in advertising. Award 1–2 marks for a basic answer with some understanding of the topic area. Award 3–4 marks for a detailed answer with clear understanding of the topic area. For example: 229 children from Georgia, USA attending pre-school were tested. (1) Matched logos with one of 23 products pictured on a game board. (1) 22 logos tested including children’s, adults’ and those of two cigarette brands (5 cigarette logos/types). (1) Found children had high rates of logo recognition. (1) Recognition rates were highest for the Disney Channel and Old Joe (cartoon character promoting Camel cigarettes). (1) Concluded that very young children see, understand and remember advertising. (1) Given serious health consequences of smoking exposure to tobacco advertising may represent a health risk. (1) Other appropriate responses should also be credited.	4

Question	Answer	Marks
3(c)	Discuss the use of children as participants in the study by Fischer et al. Points could include: + Can indicate issues regarding exposure of advertising of cigarettes to young children as the study found the children remembered this advertising. +/- can be ethical when the parents of children are asked for consent (and signed a consent form) and the study is not harmful. In this study, the participants played a game which is not harmful and the parents gave consent. Could be considered unethical as the children were shown tobacco brand logos, although this is just an image and the researchers were not trying to advertise cigarettes to the children. +/- Children can have low levels of concentration in psychological research, although Fischer et al. took this in account by having the children do a game for their study. +/- Language/communication issues. This was overcome in the Fischer et al. study as the children just had to do matching. But this does mean the children could not explain their responses. It may have been a lucky guess. – Can't generalise to adults. Although the children may recognise the brand it does not mean this recognition will continue into adulthood. Mark according to the levels of response criteria below: Level 3 (5–6 marks) • Candidates will show a clear understanding of the question and will discuss at least two points regarding children. • Candidates will provide a good explanation with clear detail. Level 2 (3–4 marks) • Candidates will show an understanding of the question and will discuss one point about children in detail or two or more in less detail. • Candidates will provide a good explanation. Level 1 (1–2 marks) • Candidates will show a basic understanding of the question and will attempt a discussion about children. • Candidates will provide a limited explanation. Level 0 (0 marks) No response worthy of credit. Other appropriate responses should also be credited.	6

Question	Answer	Marks
4(a)	Describe what psychologists have discovered about intuitive thinking and its imperfections in consumer decision-making (thinking fast and thinking slow, choice blindness, advertising and false memory). Intuitive thinking and its imperfections in consumer-decision making, including the following: • thinking fast and thinking slow/system 1 and system 2 (Shleifer, 2012) • choice blindness (Hall et al., 2010) • advertising and false memory (Braun-LaTour et al., 2004) Thinking fast and thinking slow/system 1 and system 2 (Shleifer, 2012) System 1 involves thinking fast. System 1 thinking is emotional, automatic, unconscious and effortless. Questions are answered quickly. This usually involves quick decision making for everyday products (e.g. milk and bread). System 2 involves thinking slow. System 2 thinking is calculating, conscious, slow, controlled, effortful and deliberate. This type of thinking is done by consumers buying more expensive items (such as a car or a house). Choice blindness (Hall et al., 2010) Took place in a supermarket in Sweden with 180 customers. Participants were asked to taste jam and tea to decide which they preferred out of a pair. Given jam/tea to taste (jam) or smell (tea) and rated it on a 1–10 scale. Given second taste/smell and the jam/tea has been switched to a different flavour/scent while the participant is distracted by one of the experimenters. They then tasted/smelled the item and rated on 10-point scale. Then asked which alternative they preferred and asked to sample a second time. Results – 33% of manipulated jam trials were detected (32% of tea). Detected more frequently in the least similar pairs for jam e.g. Cinnamon Apple vs Grapefruit-but not tea compared with the most similar pairs. Concluded there was considerable choice blindness. Advertising and false memory (Braun-LaTour et al., 2004) Study 1 - Lab study with 66 undergraduates assigned to either a truthful (shaking hands with Mickey Mouse) or a false advertisement condition (shaking hands with Bugs Bunny). Rated attitude, affect and likelihood of visiting Disneyland in the future. Also reported on memories of having visited Disneyland in the past. More participants remembered the false handshake as a true memory than the true handshake group. Post-event false information does influence memory. Study 2 – 100 participants were given information verbally, pictorially or both. The pictorial information group recalled more false information than the other two groups. Mark according to the levels of response descriptors in Table A. Other appropriate responses should also be credited.	8

Question	Answer	Marks
4(b)	Evaluate what psychologists have discovered about intuitive thinking and its imperfections in consumer decision-making (thinking fast and thinking slow, choice blindness, advertising and false memory), including a discussion of practical applications. A range of issues could be used for evaluation here. These include: • Named issue – Usefulness/practical applications – e.g. Thinking fast/slow could be useful to advertisers as they could identify which style is used for their product and make advertisements that appeal to the thinking style that the consumer uses. In addition, retailers could place items that use the thinking fast style near to the checkout and those that use thinking slow in a quieter area of the store. Retailers could ensure they have trained sales staff to assist customers with products that use thinking slow style. Hall et al.'s study also has good practical applications as it shows that consumers could be influenced by packaging. 'Value' products could be placed in packaging similar to branded products and this could attract more sales. Could argue the false memory study does not have a practical application as it is unlikely/illegal for advertisers to put false information into their advertisements. However, sales assistants could convince customers on a return visit that they had expressed a strong liking for a product when they last visited the store. • Strengths and weaknesses of the experimental method. • Sampling and generalisations • Ethics • Use of questionnaires/self-reports (strengths and weaknesses) Mark according to the levels of response descriptors in Table B. Other appropriate responses should also be credited.	10

Psychology and Health

Question	Answer	Marks
5(a)	Explain what is meant by ‘psychogenic pain’. Award 1 mark for a basic explanation of the term/concept. Award 2 marks for a detailed explanation of the term/concept. For example: Pain perceived by the body of a limb no longer present.(1) It is psychogenic as the pain is imagined by the mind. (1) Other appropriate responses should also be credited.	2
5(b)	Describe cognitive redefinition as a technique for managing pain. Award 1–2 marks for a basic answer with some understanding of the topic area. Award 3–4 marks for a detailed answer with clear understanding of the topic area. For example: Based on the theory that pain starts in the brain and therefore altering the patient’s thoughts about pain will change their perception of the pain. (1) It alters thinking to replace anxious thoughts about the pain with more positive thoughts. (1). For example, the patient could think that ‘this will only hurt a little bit’ rather than ‘this is the worst pain imaginable’. (1) Can also include redefining the pain as a different sensation such as pressure, warmth or cold. (1)	4

Question	Answer	Marks
5(c)	Explain <u>one</u> similarity and <u>one</u> difference between cognitive redefinition and biochemical techniques for managing pain. Similarities could include: • Both require professional (doctor to prescribe and psychologist to ‘teach’ cognitive redefinition) • Both have research support for their success. • Both have been shown to be effective in relieving pain. Cognitive redefinition relieves pain as it alters how the patient thinks about the pain and this leads to pain reduction. Medical techniques change the physiology within the body which lead to a reduction in pain. Differences could include: • Individual needs to be motivated (and of certain personality type/insight) for cognitive redefinition, whereas individual needs relatively little motivation to take drug. • Some drugs have side effects/addiction (e.g. nausea, vomiting, dizziness, dry mouth – opiates) No side effects with cognitive redefinition. • Patient more actively involved in cognitive redefinition but passive in drug therapy. • Cognitive redefinition takes time for the patient to learn the strategy and implement it, whereas medical techniques are faster acting. Mark according to the levels of response criteria below: Level 3 (5–6 marks) • Candidates will show a clear understanding of the question and will include one similarity and one difference. • Candidates will provide a good explanation with clear detail. Level 2 (3–4 marks) • Candidates will show an understanding of the question and will include one appropriate similarity in detail or one appropriate difference in detail. OR one similarity and one difference in less detail. • Candidates will provide a good explanation. Level 1 (1–2 marks) • Candidates will show a basic understanding of the question and will attempt a similarity and/or difference. This could include both but just as an attempt. • Candidates will provide a limited explanation. Level 0 (0 marks) No response worthy of credit. Other appropriate responses should also be credited	6

Question	Answer	Marks
6(a)	Describe what psychologists have discovered about measuring non-adherence to medical advice. Measuring non-adherence, including the following: • subjective: self-reports (Riekart and Droter, 1999) • objective: pill counting (Chung and Naya, 2000) • biochemical tests (Roth and Caron, 1978) • repeat prescriptions (Sherman et al., 2000) Subjective: self-reports (Riekart and Droter, 1999) Asking the patient if they are following their treatment programme. Study – Adolescents with diabetes for more than one year, aged 11–18 living with at least one parent, 94 families included, questionnaire, interview and medical data were used. Families divided into three groups – non-consenters (14), non-returns (28) and participants/returns (52). Found significant differences in adherence levels between participants and non-returns. Those who returned the questionnaire had higher adherence scores and tested blood sugar more frequently. Objective: pill counting (Chung and Naya, 2000) Counted by health professionals. There are also electronic measures such as TrackCap. Study – 57 Asthmatic patients (mix M and F) began initial screening of 3 weeks and 12 weeks of treatment during which they were told to take their medication twice a day. Given 3 weeks' worth of medication and instructed to return to clinic to collect more. TrackCap monitoring system device was issued with the tablets. On days when patients took exactly 2 tablets mean time between doses 12½ hours. 89% compliance was found – number of days two Trackcap uses at least 8 hours apart. On basis of tablet count compliance was 92%. Conclusion Trackcap is a convenient and effective medication monitoring system. Biochemical tests (Roth and Caron, 1978) Can be done via blood tests and urine samples. Study - 116 patients used. Intake of antacid regime was monitored. Although patients said their intake averaged 89%, found actual intake was 47%. Physician accuracy did not improve as they became more familiar with the patient. Pill counting was also found to be inaccurate. Therefore, it is very important for practitioners to use objective, quantitative tests to measure adherence to medical advice. Roth and Caron suggest urine and blood tests that are taken over a number of months will give a more accurate indication of adherence. Repeat prescriptions (Sherman et al., 2000) 116 children with persistent asthma. Interviews with parent/carer on clinic visit. Estimated adherence on a checklist. Followed up with a telephone call to the pharmacies the parent/carer said that they used. Information provided by the pharmacies was 92% accurate. Adherence was 72%, 61% and 38% for the three different inhalers prescribed to the children. Checking refills is an accurate way of measuring adherence. Also found doctors are not able to tell if patient is using their inhaler from consultation alone. Mark according to the levels of response descriptors in Table A. Other appropriate responses should also be credited.	8

Question	Answer	Marks
6(b)	Evaluate what psychologists have discovered about measuring non-adherence to medical advice, including a discussion about self-reports. A range of issues could be used for evaluation here. These include: Named issue – Self-reports Can evaluate both self-reports used in the research and/or the use of self-reports to measure non-adherence. Strengths include strengths of primary data, can find out what the patient/parent of patient thinks, weaknesses include issues with bias/social desirability. Although for many of the studies the purpose was to prove that self-reports do not create an accurate picture of non-adherence. Adherence and IDDM Questionnaire-R used in the Riekart and Droter study. Semi-structured interview assessing the adolescents' adherence to treatment. Also a demographics questionnaire was given to the parents of the participants. Sherman et al. – researcher interviewed the patient to find out the name of the pharmacy. Roth and Caron – patient was asked how often he took his antacids. Also asked how he measured his doses of medication. - Qualitative and quantitative measures with an evaluation of these measures - Subjective vs objective tests - Evidence to back up effectiveness of these tests (and evaluation of evidence) - Usefulness/practical applications - Cannot measure all non-adherence Mark according to the levels of response descriptors in Table B. Other appropriate responses should also be credited.	10

Psychology and organisations

Question	Answer	Marks
7(a)	McClelland proposed the theory of achievement motivation which included three types of needs. Identify <u>two</u> of these needs, other than the need for achievement. Award 1 mark for each need. Need for affiliation (1) Need for power (1) Other appropriate responses should also be credited.	2
7(b)	Describe how equity theory (Adams, 1963) explains motivation at work. Award 1–2 marks for a basic answer with some understanding of the topic area. Award 3–4 marks for a detailed answer with clear understanding of the topic area. For example: People consider what is fair in a relationship and assess their input into the relationship compared to the output from the relationship. (1) In terms of organisations an employer/employee judges the employees net worth to the company and if they are equal to other employees. (1) If the employee perceives they are putting in more than they are getting out in comparison to others at the same organisation they will not feel motivated. (1) However, if they feel they are putting in less than they are getting out in comparison to others they will feel motivated. (1) e.g. An employee works 50 hours a week compared to most employees working 40 hours per week for the same pay.(1) This employee will not be motivated.(1) Other appropriate responses should also be credited.	4

Question	Answer	Marks
7(c)	Explain <u>one</u> strength and <u>one</u> weakness of equity theory. Likely strengths include – • Equity theory also involves the free will of the employee as they are judging for themselves whether they feel their contribution is equivalent to the other employees in the company. • Adams does have applications as the employer can discuss with the employees what their perceptions are of their input and output and hope to make things fairer. • Reductionist nature of the theory makes it easier for employers to understand and therefore makes it more useful. Likely weaknesses include – • Not possible to make everything equal and also some employees may not recognise the input of others at the company if it is less tangible (e.g. the quality of the report rather than how long the report is). • The theory is describing motivation of people in general and was not specifically developed for organisations. • Reductionist/mechanistic nature of the theory. The theory suggests that employees are comparing the input and output and comparing it to others at the company. This is a view that sees employees like machines and assumes they make rational and conscious decisions in the workplace about their input and output. Many employees may be unaware of how they view their work compared to others at the same company. Mark according to the levels of response criteria below: Level 3 (5–6 marks) • Candidates will show a clear understanding of the question and will explain one strength and one weakness. • Candidates will provide a good explanation with clear detail. Level 2 (3–4 marks) • Candidates will show an understanding of the question and will explain one appropriate weakness in detail or one appropriate strength in detail. OR one weakness and one strength in less detail. Level 1 (1–2 marks) • Candidates will show a basic understanding of the question and will attempt an explanation of either a strength or a weakness. They could include both but just as an attempt. • Candidates will provide a limited explanation. Level 0 (0 marks) No response worthy of credit. Other appropriate responses should also be credited.	6

Question	Answer	Marks
8(a)	Describe what psychologists have discovered about leaders and followers in organisations (leader-member exchange model/ individualised leadership model, followership, measuring leadership). Leaders and followers, including the following: • Leader-member exchange model (Dansereau, 1994) and individualised leadership model (Dansereau, 1995) • Followership: qualities of and types (Kelley, 1988) • Measuring leadership: Leadership Practices Inventory (Kouzes and Posner, 1987) Leader-member exchange model (Dansereau, 1994) and individualised leadership model (Dansereau, 1995) Vertical Dyad Linkage theory – relationships develop through three stages. Role taking stages (where leaders and followers meet each other and leaders need to make their expectations clear), Role making stage (the team begins to work together), role routinisation (routines occur and high quality exchanges exist between leader and sub-ordinate; organisational environment can be improved at this stage). Also model suggests that leaders treat followers differently with respect to respect, trust and obligation. This leads to the creation of an in-group (those followers who are trusted) and an out-group (the followers in an organisation that the leader maintains a more formal relationship with). Individualised model – extends the theory focusing on one-to-one relationship between supervisor and subordinate and what each invests in the relationship as well as what they get out of it (their return). This can be a good relationship where the leader provides the employee a high level of support which improves the performance of the employee. It is very important that the leader develops the employee's feeling of self-worth and if this does not happen, although person may be the manager, the employee will not view them as their 'leader'. Successful leaders must vary the approach they take with each individual member of staff depending on their needs. This is why it is called 'individualised'. Followership: qualities of and types (Kelley, 1988) Qualities include: Self management – The ability to think for oneself and be able to work without close supervision. Commitment – Committed to the organisation and its goals. Competence – They are good at their job and focus on maximising their output. Courage – They are courageous, honest and have integrity. They maintain high standards even in face of dishonest or corrupt managers. They are independent and critical thinkers.	8

Question	Answer	Marks
8(a)	Types include – Sheep are passive and uncritical, lacking in initiative and sense of responsibility. Yes people – Dependent on the leader for inspiration. They are committed to the leader/organisation but are uncritical and conformist. Alienated followers – Critical and independent in their thinking but passive in carrying out their role. Survivors (pragmatics) – Adapt at surviving change. They are conservative in their views and will wait until the majority of the group support innovative ideas before giving their support. They hold the view of ‘better safe than sorry’. Effective followers (star followers) – Independent and think for themselves. Carry out their duties with energy and effectiveness. Measuring leadership: Leadership Practices Inventory (Kouzes and Posner, 1987) Measures extent to which a leader engages in the five practices of exemplary leadership. Six behavioural statements are given for each of these practices. E.g. model the way, inspire the shared vision, challenge the process, enable others to act, encourage the heart. 30 specific leadership behaviours are measured on a ten-point scale. (1 – almost never, 10 – almost always). Observers also do these ratings and this can be from manager, co-worker, etc. Total responses for each practice can range from 6–60 and the worker receives a score for each practice that they gave as well as the scores of the observers. Comparisons can be made between the employee/observer responses and over 1 million observer responses for other leaders who have taken the LPI. Finally, there are open-ended questions at the end of the inventory for the observer to answer. The leader is shown these in their final report. For example, ‘What would you like to see this leader do more of?’ Mark according to the levels of response descriptors in Table A. Other appropriate responses should also be credited.	

Question	Answer	Marks
8(b)	Evaluate what psychologists have discovered about leaders and followers in organisations (leader-member exchange model/ individualised leadership model, followership, measuring leadership), including a discussion on reductionism versus holism. A range of issues could be used for evaluation here. These include: • Named issue – Reductionism versus holism – Dansereau's theories are mainly holistic as they consider three stages of how leader/follower relationships develop. It was extended to examine the one-to-one relationship between leaders and followers. Kelley is also mainly holistic as it does consider followership qualities as well as the types of followers. However, it does theorise that followers are into one type and followers may be more than one types or be different types of followers with different managers. Finally, the LPI is mainly holistic as it has both qualitative and quantitative data that is collected. It is also collected from both the leader and some observers to get a comprehensive view of the leader's behaviour. There is also the opportunity to compare the scores with 1 million other leaders. They have also identified five practices that should be implemented by effective leaders which is more holistic. • Cultural bias of theories and inventory • Nature/nurture debate – e.g. Kouzes and Posner, 1987 suggests leadership is something that is learned rather than something a person is born with. • Deterministic nature of the theories • Reductionist nature of the theories/inventory • Individual vs situational • Evaluation of the Leadership Practices Inventory • Application to everyday life/usefulness Mark according to the levels of response descriptors in Table B. Other appropriate responses should also be credited.	10