



Cambridge International AS & A Level

PSYCHOLOGY

9990/43

Paper 4 Specialist Options: Application

October/November 2023

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 October/November 2023 series for most Cambridge IGCSE, Cambridge International A and AS Level components, and some Cambridge O Level components.

This document consists of **24** 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.

Each option has three questions:

Section A: (stimulus) Answer two questions from choice of four: (a) = 2, (b) = 4, (c) = 4 and (d)=5 [15 total]

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

Section B: (design) Answer one question from choice of four: (a) = 10 marks, (b) = 8 marks [18 total]

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

Section C: (e) Answer one question from choice of four 12 marks. TOTAL MARKS = 60

Section C: candidates answer one essay question from a choice of four, based on either of the two specialist options they have studied. There are 12 marks for this question.

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

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

| Section A: Stimulus (Generic response descriptor) | | |
|----------------------------------------------------------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (a) | 0–2 | 1 mark for basic answer e.g. identification. 1 mark for elaboration/example. |
| (b) | 0–4 | Questions have one or two requirements If 1 mark for one aspect: [1 mark max.] 1 mark for identification or statement. |
| (c) | 0–4 | If 2 marks for two aspects: [2 + 2 marks] 1 mark basic answer. 2 marks elaboration × 2. If 4 marks for one aspect: [4 marks] 1–2 marks basic answer. 3–4 marks detailed answer/elaboration. Partial answers score half marks (i.e. 4 to 2 or 2 to 1) |
| (d) | 0–5 | Question requires discussion . Question always plural of each argument. Question always requires conclusion. 1 mark for each for/against argument (however detailed) up to 4 max. 1 mark for conclusion. NOTE: If three (or more) arguments for one side, best two credited. If one side only, max. 2 marks. |
| 0 | 0 | No response worthy of credit. |

| Section C: Essay/Evaluate (Generic response descriptor) | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Level | Marks | Level Descriptor |
| <p>NOTE: Questions are always worded in the same way: ‘to what extent do you agree with this statement? Use examples of research you have studied to support your answer’. However, the words ‘research’ must be taken in the widest sense: (i) different examples can be used from the same piece of research; (ii) examples from different pieces of research; (iii) examples from methodology, such as a specific method or technique; (iv) examples from methodological issues such as ethics, generalisations, quantitative/qualitative data; psychological versus physiological, etc. (v) examples of debates and issues such as reductionism and holism; individual and situational, etc.</p> | | |
| 4 | 10–12 | <ul style="list-style-type: none"> • Both sides of the argument are considered and are relevant to the question. • Appropriate examples are included which fully support both sides. • Discussion is detailed with good understanding and clear expression. • A conclusion is drawn with appropriate justification. |
| 3 | 7–9 | <ul style="list-style-type: none"> • Both sides of the argument are considered and are relevant to the question. They may be imbalanced in terms of quality or quantity. • Some examples are included, are appropriate and often support both sides. • The answer shows good discussion with reasonable understanding. • A basic conclusion is drawn with little or no justification |
| 2 | 4–6 | <ul style="list-style-type: none"> • Reasons are limited to one side of the argument. • Limited reference to examples, or lack of detail. • The answer shows some understanding. • There is no conclusion. |
| 1 | 1–3 | <ul style="list-style-type: none"> • Anecdotal discussion, brief detail, minimal relevance. Very limited range. • Discussion may be inaccurate or incomplete. • May evaluate topic area studies, making only indirect reference to the question. |
| 0 | 0 | <ul style="list-style-type: none"> • No response worthy of credit. |

| Section B: Design a study question part (a) (Generic response descriptor) | | |
|----------------------------------------------------------------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Level | Marks | Level Descriptor |
| 4 | 9–10 | <ul style="list-style-type: none"> The design is appropriate to the named investigation and is based on thorough psychological knowledge. The design is accurate, coherent and detailed, and it tests the proposed investigation competently. Four or five design features are included. The features are clearly applied to the design throughout the answer and the candidate clearly understands the main features involved in designing an investigation. The response has proposed an appropriate design, has applied a range of relevant methodological design features with competence and shown clear understanding. |
| 3 | 7–8 | <ul style="list-style-type: none"> The design is appropriate to the named investigation and is based on good psychological knowledge. The design is accurate, coherent and detailed, and it tests the proposed investigation competently. Two or three design features are included. The features are often applied to the design and the candidate shows good understanding in places. The response has proposed an appropriate design, has applied some relevant methodological design features and has shown good understanding. |
| 2 | 4–6 | <ul style="list-style-type: none"> The design is mostly appropriate to the named investigation and is based on psychological knowledge. The design is mostly accurate, coherent and detailed in places and it tests the proposed investigation. Design features are limited in their understanding. |
| 1 | 1–3 | <ul style="list-style-type: none"> The design may not be appropriate to the named investigation and use of terminology is sparse or absent. Basic psychological understanding is shown. The design lacks coherence and is limited in understanding. One or two appropriate design features are identified but incorrectly applied. The response lacks detail. |
| 0 | 0 | <ul style="list-style-type: none"> No response worthy of credit. The candidate describes the study listed on the syllabus. |

| Section B: Explain a study question part (b) (Generic response descriptor) | | |
|-----------------------------------------------------------------------------------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Level | Marks | Level Descriptor |
| 3 | 6–8 | <ul style="list-style-type: none"> • Quality and depth of explanation is thorough. • Description of knowledge is accurate, coherent and detailed. • Use of terms is accurate and use of psychological terminology is comprehensive. • Understanding of methodology (such as elaboration, use of example, quality of description) is very good. • The design is effectively explained in relation to the topic area. • There is a balance of methodology and topic area/relevant study knowledge. |
| 2 | 4–5 | <ul style="list-style-type: none"> • Quality of explanation and depth of explanation is competent. • Description of knowledge is mainly accurate, coherent and reasonably detailed. • Use of terms is mainly accurate and use of psychological terminology is competent. • Understanding of methodology (such as elaboration, use of example, quality of description) is good. • The design is adequately explained in relation to the topic area. • There is an imbalance of methodology and topic area/relevant study knowledge. • Max. 5 marks if only methodological or psychological decisions. |
| 1 | 1–3 | <ul style="list-style-type: none"> • Quality of explanation and depth of explanation is basic. • Description of knowledge is often accurate, generally coherent, but lacks detail. • Use of terms is basic and use of psychological terminology is adequate. • Understanding of methodology (such as elaboration, use of example, quality of description) is limited. • The design is poorly explained in relation to the topic area. • There is an imbalance of methodology and topic area/relevant study knowledge. |
| 0 | 0 | <ul style="list-style-type: none"> • No response worthy of credit |

| Question | Answer | Marks |
|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| Section A: Stimulus question Psychology and abnormality | | |
| 1 | One explanation of bipolar disorder is that it is genetic. The study by Oruc et al. (1997) selected 42 patients with bipolar disorder. Sixteen of these patients had a first-degree relative with a history of bipolar disorder. All patients had a clinical interview and their DNA was analysed. | |
| 1(a) | <p>Explain what is meant by the term 'bipolar disorder'.</p> <p>Most likely answer (other appropriate responses to be credited):</p> <ul style="list-style-type: none"> • also known as manic depression (1 mark) characterised by extreme mood swings from one pole to the other (hence bipolar) (2 marks) • bipolar disorder (BP) is characterised by episodes of elevated mood alternating with periods of depression (Oruc et al.) (2 marks) <p>Marks: 1 mark for basic explanation, 2 marks for elaboration/detail.</p> | 2 |
| 1(b) | <p>Outline <u>two</u> findings from the study by Oruc et al.</p> <p>Most likely answer (other appropriate responses to be credited):</p> <ul style="list-style-type: none"> • no significant associations were found (1 mark) in the total patient sample (2 marks) OR between bipolar patients and control group (2 marks) • polymorphisms in female patients were observed (1 mark) OR these results suggest an increase in susceptibility for bipolar disorder in women (1 mark) i.e. serotonin receptor 5-HT_{2c} and serotonin transporter 5-HTT genes (2 marks) <p>Marks: 1 mark basic, 2 marks for detail × 2.</p> | 4 |
| 1(c) | <p>Outline <u>one</u> explanation for depression, other than a biological explanation.</p> <p>Most likely answer:</p> <ul style="list-style-type: none"> • Cognitive (Beck, 1979) proposes that people react differently to aversive stimuli because of negative automatic thoughts (NATs). Depression results from the negative cognitive triad, comprising unrealistically negative views about the self, the world and the future. • Learned helplessness/attributional style (Seligman, 1988) If a person makes an internal attribution (they are the cause), and if they believe that this is stable and global (the cause is consistent and this applies everywhere), then they may feel helpless and may experience depression. However, if they make other attributions (e.g. that the cause is external or situational; or unstable and specific), then helplessness and depression are unlikely. <p>Marks: 1 mark basic answer, 2–4 marks outline of increasing detail and quality.</p> | 4 |

| Question | Answer | Marks |
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| 1(d) | <p>Discuss the strengths and weaknesses of using clinical interviews to gather data about the genetic explanation of depression. You should include a conclusion in your answer.</p> <p>Most likely answer (other appropriate responses to be credited):</p> <p>Strengths:</p> <ul style="list-style-type: none"> • the participant knows their family relationships and health and illness history, the practitioner does not • the participant can explain and answer any question that may be asked • the practitioner can use verbal and non-verbal skills or other tests <p>Weaknesses:</p> <ul style="list-style-type: none"> • the participant may not tell the truth, exaggerate or underemphasise details • a clinical interview is subjective and no objective information is available • a participant may not know sufficient terminology to answer what is being asked <p>Conclusion: any appropriate conclusion drawn from the discussion that has been presented. 1 mark if appropriate. A conclusion is a 'decision reached by reasoning' and so a summary of points already made scores 0 marks.</p> <p>Marks: Question requires discussion; always plural of each argument, and always requires conclusion. 1 mark for each advantage/disadvantage (however detailed) and related to the question up to 4 max. 2 marks max. for two strengths/weaknesses unrelated to the question. 1 mark for conclusion.</p> | 5 |

| Question | Answer | Marks |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 2 | <p>To investigate the topic of retail store architecture, Turley and Milliman (2000) reviewed sixty studies of atmospheric effects on shoppers. They referred to five ‘atmospheric variables’, including layout and design variables, and point-of-purchase and decoration variables.</p> | |
| 2(a) | <p>Explain what is meant by a ‘review of studies’ as conducted by Turley and Milliman.</p> <p>Most likely answer (other appropriate responses to be credited) (from the study):</p> <p>NOTE: A systematic review attempts to gather all available empirical research by using clearly defined, systematic methods to obtain answers to a specific question. A meta-analysis is the <i>statistical process of analyzing and combining results</i> from several similar studies.</p> <ul style="list-style-type: none"> • a review collects and analyses multiple research studies or papers (1 mark) related to atmospheric effects on shopping behaviour (2 marks) • Turley and Milliman (2000): We review the pertinent literature by constructing a comprehensive table of the empirical studies in this area that focuses on the various findings associated with these investigations (2 marks) <p>Marks: 1 mark for partial explanation; 2 marks for elaboration/explanation</p> <p>NOTE: including 60 studies and 5 categories receives no credit as it is repeating the stem.</p> <p>NOTE: explaining a meta-analysis can be awarded 1 mark max.</p> | 2 |
| 2(b)(i) | <p>Suggest <u>one</u> ‘point-of-purchase’ variable.</p> <p>Most likely answers (Turley and Milliman):</p> <ul style="list-style-type: none"> a Point-of-purchase displays b Signs and cards (1 mark) signs combined with sale price information displayed at the point of purchase are effective (2 marks) c Wall decorations d Degrees and certificates (1 mark) shows the quality of the establishment/service and so give people/shoppers confidence (2 marks) e Pictures f Artwork g Product displays h Usage instructions i Price displays j Teletext <p>Marks: 1 mark identification of any one of the above, 2 marks for explanation of the identified variable.</p> <p>NOTE: question does not state ‘Turley and Milliman’ so any appropriate variable receives credit.</p> | 2 |

| Question | Answer | Marks |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 2(b)(ii) | <p>Explain how the variable you suggested in (b)(i) relates to <u>one</u> model of the effects of ambience.</p> <p>The two main models are as follows:</p> <ul style="list-style-type: none"> • The Mehrabian and Russell (1974) pleasure/arousal/dominance (PAD) model: pleasure (the degree to which a person felt happy or satisfied in a place), arousal (the degree of stimulation caused by an atmosphere), and dominance (the degree to which a person feels in control in a situation) (1 mark for brief explanation) how the variable in (i) relates to this (2 marks) • The cognition-emotion model Lazarus (1991). Our appraisal of a situation (any aspect of the display) causes an emotional response. A stimulus in the environment/situation can be consciously or unconsciously processed and this leads us to be aroused and experience emotion (which both happen at the same time). (1 mark for brief explanation) how the variable in (i) relates to this (2 marks) <p>Marks: 1 mark brief explanation of model, 2 marks for explanation of how model and point-of-purchase variable relate.</p> | 2 |
| 2(c) | <p>Suggest <u>two</u> ways in which the effect of atmospheric variables on shoppers could be measured.</p> <p>Most likely answer:</p> <ul style="list-style-type: none"> • Observation e.g. covert (1 mark) of the increase or decrease in number of shoppers entering the store or remaining in the store (2 marks) • Field experiment conducted in a store (1 mark) with IV of variable v control of no variable, DV of time in store, number of purchases, etc. (2 marks) • Questionnaire e.g. with closed questions (1 mark) asking about variables and how they affect responses such as pleasure, arousal, dominance (PAD) (2 marks) • Interview e.g. semi-structured (1 mark) asking about variables and how they affect responses such as pleasure, arousal, dominance (PAD) (2 marks) • Also credit 'sales/purchase behaviour' (1 mark) in 25/28 studies atmospheric variables affected consumer sales (2 marks) <p>Marks: 1 mark outline of method, 2 marks detailed answer/elaboration/use of example × 2.</p> <p>NOTE: variable does not need to be identified, emphasis is 'way'/method. NOTE: identification of method is insufficient for 1 mark (needs to be technique or format)</p> | 4 |

| Question | Answer | Marks |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 2(d) | <p>Discuss the strengths and weaknesses of using field experiments to investigate the effect of atmospheric variables on shoppers. You should include a conclusion in your answer.</p> <p>Most likely answer (other appropriate responses to be credited):</p> <p>Strengths:</p> <ul style="list-style-type: none"> • a field experiment has an IV, DV and controls = cause and effect • often participants do not know they are taking part in a study and so behave more naturally • most consumer behaviour (e.g. shopping) takes place in the real world and so studies should be conducted in the real world (rather than in a laboratory) <p>Weaknesses:</p> <ul style="list-style-type: none"> • a field experiment may have variables that are more difficult to control than a laboratory experiment • field experiments may gather quantitative data but other methods used in conjunction may give reason for decision to purchase or not • It may be reductionist to isolate variables to study (i.e. the IV) when many other variables that are controlled may contribute to consumer behaviour as a whole <p>Conclusion: any appropriate conclusion drawn from the discussion that has been presented. 1 mark if appropriate. A conclusion is a 'decision reached by reasoning' and so a summary of points already made scores 0 marks.</p> <p>Marks: Question requires discussion; always plural of each argument, and always requires conclusion. 1 mark for each advantage/disadvantage (however detailed) and related to the question up to 4 max. 2 marks max. for two strengths/weaknesses unrelated to the question. 1 mark for conclusion.</p> | 5 |

| Question | Answer | Marks |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 3 | Many people experience chronic pain. Some people use medical techniques (biochemical) such as drugs, psychological techniques, or alternative techniques to manage (and/or control) their pain. Medical techniques can also be used to control acute pain. | |
| 3(a) | <p>Explain what is meant by chronic pain, using an example.</p> <p>Most likely answer (other appropriate responses to be credited):</p> <p>Explanation: chronic pain is long lasting / months to years e.g. 3 months or more (1 mark) Example: identification of a correct example such as arthritis (+ 1 mark)</p> <p>Marks: 1 mark for explanation, 1 mark for example.</p> | 2 |
| 3(b) | <p>Outline <u>two</u> ways in which medical techniques can be used to control acute pain.</p> <p>Most likely answer (other appropriate responses to be credited):</p> <ul style="list-style-type: none"> • peripherally acting analgesics (1 mark): aspirin, paracetamol ‘over the counter’ medicines for headache, etc. (2 marks) • local anaesthetics: (1 mark) (i) mild such as rubbing in cream at painful site; (ii) strong such as injection into local area (for stitching a wound, extracting a tooth). (2 marks) • general anaesthetics: (1 mark) work directly on the nervous system, such as morphine resulting in ‘unconsciousness’ in the patient (2 marks) <p>Marks: 1 mark for identification. 2 marks for detailed answer/elaboration/example × 2. 0 marks for ways to control <i>chronic</i> pain. 0 marks for any non-medical technique.</p> <p>NOTE: credit can also be given to answers explaining how these analgesics/ anaesthetics work.</p> | 4 |
| 3(c) | <p>Suggest <u>two</u> differences between acupuncture and stimulation therapy/ TENS used to manage pain.</p> <p>Most likely answer (other appropriate responses to be credited):</p> <ul style="list-style-type: none"> • acupuncture is usually administered by a qualified practitioner who knows where to insert the needles. TENS can be administered by the person themselves, not needing anyone with experience. • acupuncture relieves pain, TENS distracts the person from the original pain. • acupuncture can be used to prevent pain (as an alternative to anaesthetic). TENS would never be used for this purpose. <p>Marks: 1 mark for one side, + 1 mark for alternative side × 2</p> | 4 |

| Question | Answer | Marks |
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| 3(d) | <p>Discuss the strengths and weaknesses of using ‘psychological techniques’ to manage pain. You should include a conclusion in your answer.</p> <p>Most likely answer (other appropriate responses to be credited):</p> <p>Strengths</p> <ul style="list-style-type: none"> • people control the treatment themselves; people can choose when to apply attention diversion for example • people can apply psychological techniques any place, any time anywhere. <p>Weaknesses</p> <ul style="list-style-type: none"> • people may prefer to have a medical treatment; a medically qualified person treating them • people may not be ‘good’ at applying psychological techniques. They have to be active for the procedure to work and they may prefer to be passive • psychological techniques need time to become proficient; they are not a quick ‘take a drug’ solution <p>Conclusion: any appropriate conclusion drawn from the discussion that has been presented. 1 mark if appropriate. A conclusion is a ‘decision reached by reasoning’ and so a summary of points already made scores 0 marks.</p> <p>Marks: Question requires discussion; always plural of each argument, and always requires conclusion. 1 mark for each advantage/disadvantage (however detailed) and related to the question up to 4 max. 2 marks max. for two strengths/weaknesses unrelated to the question. 1 mark for conclusion.</p> | 5 |

| Question | Answer | Marks |
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| 4 | Groupthink is what happens when group cohesion causes a group, such as a management team, to make a decision without any critical evaluation. Janis (1971) identifies eight ‘symptoms’ (features) of groupthink. | |
| 4(a) | <p>Give <u>one</u> real-life example of groupthink.</p> <p>Most likely answer (other appropriate responses to be credited):</p> <ul style="list-style-type: none"> • the Bay of Pigs fiasco (this example appears at the beginning of the Janis paper) • the attack on Pearl Harbour (also in the Janis paper) • Other ‘non-published’ examples are creditworthy if they are fully explained how they relate to groupthink. <p>Marks: 1 mark basic answer (identification of event), 2 marks detailed answer/elaboration.</p> | 2 |
| 4(b) | <p>Explain <u>two</u> ‘symptoms’ of groupthink as identified by Janis.</p> <p>Definitive answers</p> <ol style="list-style-type: none"> 1 The illusion of invulnerability (1 mark) the belief that nothing can go wrong (2 marks) 2 Rationale: warning signs ignored and assume everything is fine. 3 Morality: assume group is moral and ignore ethical or moral consequences (NOTE: text calls this ‘unquestioning beliefs’) 4 Stereotypes: dissenters are in the out-group, where no-one wants to be 5 Pressure (to conform) pressure placed on dissenters 6 Self-censorship: less likely to listen to our doubt if all others are in agreement 7 The illusion of unanimity (1 mark) the belief that group members who respect each other will automatically agree (2 marks) 8 Mindguards: ‘self-appointed censors’ who hide problematic information from the group. <p>Marks: 1 mark identification of term, 2 marks detailed answer/elaboration (as above)</p> | 4 |
| 4(c) | <p>Suggest <u>two</u> strategies that can be used to avoid groupthink.</p> <p>Most likely answer (other appropriate responses to be credited):</p> <ul style="list-style-type: none"> • encouraging individual evaluation • promoting open enquiry • breaking a full group into sub-groups • admitting shortcomings • holding second-chance meetings • not rushing to a quick solution • devil’s advocate <p>Marks: 1 mark basic answer, 2 marks detailed answer/elaboration.</p> | 4 |

| Question | Answer | Marks |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 4(d) | <p>Discuss the strengths and weaknesses of using observations to assess groupthink in a management team. You should include a conclusion in your answer.</p> <p>Most likely answer (other appropriate responses to be credited):</p> <p>Strengths:</p> <ul style="list-style-type: none"> • a covert observation means the person is unaware they are being observed and so behaves naturally which can give accurate information about how people behave when part of a team • observation can be recorded on CCTV allowing observers to check/re-run • observations can have more than one observer so reliability of observations can be checked confirming how people behave when part of a team <p>Weaknesses:</p> <ul style="list-style-type: none"> • if an overt observation is conducted by a member of the team behaviours might be missed • if a participant observation is conducted by a member of the team behaviours might be missed • a structured observation may not account for new or unexpected behaviour and so some features of groupthink might be missed <p>Conclusion: any appropriate conclusion drawn from the discussion that has been presented. 1 mark if appropriate. A conclusion is a 'decision reached by reasoning' and so a summary of points already made scores 0 marks.</p> <p>Marks: Question requires discussion; always plural of each argument, and always requires conclusion. 1 mark for each advantage/disadvantage (however detailed) and related to the question up to 4 max. 2 marks max. for two strengths/weaknesses unrelated to the question. 1 mark for conclusion.</p> | 5 |

| Question | Answer | Marks |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Section B | | |
| 5(a) | <p>Design a study to investigate the long-term effectiveness of systematic desensitisation in the treatment of anxiety disorders.</p> <p>Marks: use generic levels of response Design a study question part (a). Additional: Candidates should design the study showing evidence of design features appropriate to the named method. The named method is: any appropriate method</p> <p>Specific features:</p> <ul style="list-style-type: none"> • Experiments: type, IV, DV, controls, experimental design. • Observations: type, setting, response categories, sampling frame, number of observers. • Questionnaires/Interviews: type, setting, example questions. Scoring/rating scale, analysis of responses. <p>General features of research methodology: sampling technique and sample, type of data, ethics, reliability, validity, data analysis.</p> | 10 |
| 5(b) | <p>Explain the psychological and methodological evidence on which your study is based.</p> <p>Marks: use generic levels of response ‘Design a study’ question part (b). NOTE: If only methodological or psychological explanation is provided max. 5 marks Candidates are expected to explain the reasons for the suggested design in part (a). Explanation should be both psychological and methodological. Psychological to include appropriate theory or research.</p> <p>Additional: candidates are expected to justify their decisions or evidence presented regarding the design made in answer to question part (a).</p> <p>Syllabus: treatment and management of anxiety disorders: systematic desensitisation (Wolpe, 1958)</p> <p>Psychological: An anxiety hierarchy is constructed – a range of situations or events with which the fear is associated, arranged from least fearful (e.g. imagining exposure) to the most fearful (e.g. in vivo). The patient is trained in deep muscle relaxation and deep breathing techniques. The patient then thinks about, or is brought into contact with, the least fearful item and applies relaxation techniques. When relaxed, the next item in the hierarchy is presented. This continues until the person is desensitised.</p> <p>Methodological: explanation of method using general and specific features as above.</p> | 8 |

| Question | Answer | Marks |
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| 6(a) | <p>McCarthy's marketing mix model includes four concepts related to advertising: product, price, place, promotion (The 4 Ps).</p> <p>Design a study using a questionnaire to investigate which of these four concepts has <u>most</u> effect on consumer behaviour.</p> <p>Marks: use generic levels of response Design a study question part (a). Additional: Candidates should design the study showing evidence of design features appropriate to the named method. The named method is: questionnaire.</p> <p>Specific features: Questionnaires/Interviews: type, setting, example questions. Scoring/rating scale, analysis of responses.</p> <p>General features of research methodology: sampling technique and sample, type of data, ethics, reliability, validity, data analysis.</p> | 10 |
| 6(b) | <p>Explain the psychological and methodological evidence on which your study is based.</p> <p>Marks: use generic levels of response 'Design a study' question part (b). NOTE: If only methodological or psychological explanation is provided max. 5 marks Candidates are expected to explain the reasons for the suggested design in part (a). Explanation should be both psychological and methodological. Psychological to include appropriate theory or research.</p> <p>Additional: candidates are expected to justify their decisions or evidence presented regarding the design made in answer to question part (a).</p> <p>Syllabus: types of advertising and advertising techniques: marketing mix models: The 4 Ps (McCarthy)</p> <p>Psychological: Product: this could include the basic product or extensive product, the product with added qualities such as its packaging, brand name, service and guarantee. Price: the amount a customer pays for the product (and includes all aspects such as discount, special offer, sale price, etc.) Place: the location of where the product is sold (retail park, shopping mall, online) Promotion: includes all the communications the company makes about the product, such as advertising.</p> <p>Methodological: explanation of method using general and specific features as above.</p> | 8 |

| Question | Answer | Marks |
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| 7(a) | <p>Design a study to investigate age differences in stages of delay, as proposed by Safer, before seeking medical treatment.</p> <p>Marks: use generic levels of response Design a study question part (a). Additional: Candidates should design the study showing evidence of design features appropriate to the named method. The named method is: any appropriate method</p> <p>Specific features:</p> <ul style="list-style-type: none"> • Experiments: type, IV, DV, controls, experimental design. • Observations: type, setting, response categories, sampling frame, number of observers. • Questionnaires/Interviews: type, setting, example questions. Scoring/rating scale, analysis of responses. <p>General features of research methodology: sampling technique and sample, type of data, ethics, reliability, validity, data analysis.</p> | 10 |
| 7(b) | <p>Explain the psychological and methodological evidence on which your study is based.</p> <p>Marks: use generic levels of response ‘Design a study’ question part (b). NOTE: If only methodological or psychological explanation is provided max. 5 marks Candidates are expected to explain the reasons for the suggested design in part (a). Explanation should be both psychological and methodological. Psychological to include appropriate theory or research.</p> <p>Additional: candidates are expected to justify their decisions or evidence presented regarding the design made in answer to question part (a).</p> <p>Syllabus: misusing health services: delay in seeking treatment (Safer et al., 1979)</p> <p>Psychological: Safer (1979) interviewed patient about delay in seeking help. Three delay reasons were identified:</p> <ol style="list-style-type: none"> (i) appraisal delay – number of days from the first symptom to the patient deciding they were ill (ii) illness delay – number of days from deciding they were ill until deciding to seek medical attention (iii) utilisation delay – number of days from deciding to seek medical attention until actual appointment. <p>Methodological: explanation of method using general and specific features as above.</p> | 8 |

| Question | Answer | Marks |
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| 8(a) | <p>Design an experiment to investigate levels of concentration in workers in different types of office design.</p> <p>Marks: use generic levels of response Design a study question part (a).</p> <p>Additional: Candidates should design the study showing evidence of design features appropriate to the named method. The named method is: experiment.</p> <p>Specific features: Experiments: type, IV, DV, controls, experimental design.</p> <p>General features of research methodology: sampling technique and sample, type of data, ethics, reliability, validity, data analysis.</p> | 10 |
| 8(b) | <p>Explain the psychological and methodological evidence on which your experiment is based.</p> <p>Marks: use generic levels of response ‘Design a study’ question part (b). NOTE: If only methodological or psychological explanation is provided max. 5 marks Candidates are expected to explain the reasons for the suggested design in part (a). Explanation should be both psychological and methodological. Psychological to include appropriate theory or research.</p> <p>Additional: candidates are expected to justify their decisions or evidence presented regarding the design made in answer to question part (a).</p> <p>Syllabus: Physical and psychological work conditions: open plan offices (Oldham and Brass, 1979)</p> <p>Psychological: Oldham and Brass (1979) looked at a number of measures when moving to a different type of office. Findings: there was a decrease in work satisfaction, interpersonal satisfaction and internal work motivation. Also, participants were interviewed. The new office was described as a ‘fishbowl,’ ‘cage,’ or ‘warehouse’, reflecting on an inability to concentrate, to develop close friendships, and to complete a job.</p> <p>Methodological: explanation of method using general and specific features as above.</p> | 8 |

| Question | Answer | Marks |
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| Section C | | |
| 9 | <p><i>‘Psychometric measures used to assess anxiety disorders, such as the Generalised Anxiety Disorder assessment (GAD-7), provide therapists with no useful information.’</i></p> <p>To what extent do you agree with this statement? Use examples of research you have studied to support your answer.</p> <p>Marks: use generic levels of response in table C.</p> <p>Syllabus: characteristics of anxiety disorders: measures: the blood injection phobia inventory (BIPI); Generalised Anxiety Disorder assessment (GAD-7)</p> <p>Most likely (any other appropriate responses should be credited):</p> <p>Useful:</p> <ul style="list-style-type: none"> • measures such as BIPI and GAD-7 indicate the severity of a disorder. • these measures can highlight specific features of the disorder. • these measures can be used as comparisons with others with the same disorder. • these measures provide quantitative data. <p>Not useful:</p> <ul style="list-style-type: none"> • talking to a therapist in a clinical interview can reveal perhaps more than any test. • the measure can use scales (5 or 7 point) which may not represent what the person thinks: they could take a neutral option. • people answering the questionnaires may not be honest about everything. • measures assume people have similarities; they are less individualistic. | 12 |

| Question | Answer | Marks |
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| 10 | <p><i>‘If playing one type of music at one open air market stall increases the amount of money spent, this finding can be generalised to all open air market stalls.’</i></p> <p>To what extent do you agree with this statement? Use examples of research you have studied to support your answer.</p> <p>Marks: use generic levels of response in table C.</p> <p>Syllabus: sound and consumer behaviour: music in open air markets (Guéguen et al., 2007)</p> <p>Most likely (any other appropriate responses should be credited):</p> <p>Can generalise:</p> <ul style="list-style-type: none"> • large numbers of people shop at a large number of open-air markets where music is played. • playing music is a common way to relax people, to entertain them and to advertise – all over the world. • the findings of field experiments, being experiments have manipulated and controlled variables; such studies can be replicated anywhere. • other evidence shows playing music increases sales: North et al. found that classical music increased spending. <p>Cannot generalise:</p> <ul style="list-style-type: none"> • the location of the study (e.g. a town in France) might not generalise to all other locations. • the type of music (joyful, samba) played might also be specific to that location and not liked in other places/countries. • the type of music was ‘used for its appropriateness for sale of toys and trinkets’ and so would not generalise to sales of other items. | 12 |

| Question | Answer | Marks |
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| 11 | <p><i>‘Practitioner style (doctor or patient-centred) is irrelevant. What is important is the way in which a practitioner is dressed.’</i></p> <p>To what extent do you agree with this statement? Use examples of research you have studied to support your answer.</p> <p>Marks: use generic levels of response in table C.</p> <p>Syllabus: practitioner style: doctor and patient-centred (Byrne and Long, 1976, Savage and Armstrong, 1990). Also relevant: non-verbal communications (McKinstry and Wang, 1991) and verbal communications (McKinlay, 1975; Ley, 1988)</p> <p>Most likely (any other appropriate responses should be credited):</p> <p>Agree:</p> <ul style="list-style-type: none"> • if the patient understands medical terminology then they understand their illness and their treatment programme. Practitioner style is irrelevant. • if the practitioner is dressed appropriately then the patient will have confidence in what is being said. Practitioner style is irrelevant. • a chatty practitioner style is unimportant. Present symptoms, get diagnosed, treatment and leave. <p>Disagree:</p> <ul style="list-style-type: none"> • studies have shown that some people prefer a patient-centred approach/ doctor-centred approach – dress and terminology are irrelevant. • the practitioner may use complex words and the patient may not understand. A patient-centred approach would help the patient to understand. • the way the doctor dresses is unimportant; their knowledge and skills are what is important and the way they interact with the patient. Style is crucial. | 12 |

| Question | Answer | Marks |
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| 12 | <p><i>‘All accidents at work are caused by errors in operator-machine systems (system errors); <u>not</u> by other factors, such as human error.’</i></p> <p>To what extent do you agree with this statement? Use examples of research you have studied to support your answer.</p> <p>Marks: use generic levels of response in table C.</p> <p>Syllabus: Health and safety: accidents at work: errors and accidents in operator-machine systems.</p> <p>Most likely (any other appropriate responses should be credited):</p> <p>Human error:</p> <ul style="list-style-type: none"> • Riggio (1990) outlines four type of human error (omission, commission, sequence errors and timing errors). • human error can be due to tiredness/fatigue, use of alcohol and/or drugs or because of accident proneness (accident prone personality). • more errors happen during the 8pm–6am ‘graveyard’ shift because humans are vulnerable. • humans make substitution errors and apply motion stereotypes when an emergency happens. <p>Systems errors:</p> <ul style="list-style-type: none"> • sometimes there are systems errors: the Three Mile Island incident is commonly quoted where the poorly designed system was unmanageable. • sometimes machines are poorly designed where lights are too dim, buzzers too quiet, controls not user-friendly. • most accidents are a combination of both human and system errors: the machine-operator system does not work flawlessly. | 12 |