Cambridge Assessment International Education

# Cambridge International AS & A Level

**PSYCHOLOGY** **9990/42**

Paper 4 Specialist Options: Application **February/March 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.

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This document consists of **25** printed pages.

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## Generic Marking Principles

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptors for a question. Each question paper and mark scheme will also comply with these marking principles.

GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

GENERIC MARKING PRINCIPLE 2:

Marks awarded are always **whole marks** (not half marks, or other fractions).

GENERIC MARKING PRINCIPLE 3:

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently, e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

GENERIC MARKING PRINCIPLE 5:

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

GENERIC MARKING PRINCIPLE 6:

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

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## 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.

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**Each option has three questions:**

**Section A: (stimulus) Answer two questions from choice of four: (a)=2, (b)=4, (c)=4 & (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.*

<table>
<tr><th colspan="3">Section A: Stimulus (Generic response descriptor)</th></tr>
<tr><td>(a)</td><td>0–2</td><td>1 mark for basic answer e.g. identification.<br>1 mark for elaboration/example.</td></tr>
<tr><td>(b)</td><td>0–4</td><td rowspan="2">Questions have one or two requirements<br>If 1 mark for one aspect: [1 mark max] 1 mark for identification or statement.<br>If 2 marks for two aspects: [2 + 2 marks] 1 mark basic answer. 2 marks elaboration x2.<br>If 4 marks for one aspect: [4 marks] 1–2 marks basic answer. 3–4 marks detailed answer/elaboration.<br>Partial answers score half marks (i.e. 4 to 2 or 2 to 1)</td></tr>
<tr><td>(c)</td><td>0–4</td></tr>
<tr><td>(d)</td><td>0–5</td><td>Question requires discussion. Question always plural of each argument.<br>Question always requires conclusion.<br>1 mark for each for/against argument (however detailed) up to 4 max. 1 mark for conclusion.<br>Note: If three (or more) arguments for one side, best two credited. If one side only, max 2 marks.</td></tr>
<tr><td>0</td><td>0</td><td>No response worthy of credit.</td></tr>
</table>

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

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

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

| Question | Answer | Marks |
|---|---|---|
| **Section A: Stimulus question Psychology and abnormality** | | |
| 1 | **Depression can be treated with medical treatments and it can be managed with psychological treatments. Medical treatments include the use of electro-convulsive therapy (ECT) and chemical/drug treatments. Depression can also be treated psychologically.** | |
| 1(a) | **Outline the procedure of ECT for depression.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br>• muscle relaxant given<br>• electricity applied bilaterally or unilaterally<br>• patient convulses (twitches because of muscle relaxant)<br>• patient is unconscious, then wakes and recovers.<br><br>**Marks:** 1 mark for brief outline, 2 marks for detail/elaboration. | **2** |
| 1(b)(i) | **Explain <u>one</u> chemical/drug treatment for depression.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br>**chemical/drugs (MAO, SSRIs)**<br>• MAOIs <u>inhibit</u> the enzyme monoamine oxidase. This enzyme normally breaks down noradrenaline, serotonin and dopamine, but these neurotransmitters are not broken down, they stay at normal high levels and so 'reduce depression'.<br>• SSRIs prevent serotonin from being reabsorbed and broken down after crossing a synapse.<br><br>**Marks:** 1 mark for identification, 2 marks for detail/elaboration. | **2** |
| 1(b)(ii) | **Suggest <u>one</u> weakness of this chemical/drug treatment for depression.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br>• side effects (1 mark) hypertension, dizziness, nausea, fatigue, headaches, insomnia (2 marks)<br>• drugs have to be taken according to a treatment programme (1 mark) for example they have to be taken twice per day, every day or the depression returns (2 marks)<br>• drugs are addictive (1 mark) which may occur after 3 or 4 weeks and withdrawal symptoms may be worse that initial depression (2 marks)<br><br>**Marks:** 1 mark for identification, 2 marks for explanation/example. 0 marks if the answer in (b)(ii) is not the same chemical/drug treatment as explained in (b)(i). | **2** |

| Question | Answer | Marks |
|---|---|---|
| 1(c) | **Outline <u>two</u> psychological treatments for depression.**<br><br>**Most likely answer**:<br>• Beck et al. (1979) **cognitive restructuring** is a stage process, (i) explanation of therapy (ii) identification of unpleasant emotions, (iii) the situations in which these occur and (iv) associated negative automatic thoughts. (v) challenge the negative thoughts and (vi) replace them with positive thoughts. (vii) challenge the underlying dysfunctional beliefs and (viii) therapy ends.<br>• **Rational emotive behaviour therapy**. (REBT) Ellis focused on how illogical beliefs are maintained through: A: an activating event, B: the belief held about A, C: the consequences – thoughts, feelings or behaviours – resulting from A. RET therefore involves: D: disputing the irrational beliefs, E: the effects of successful disruption of the irrational beliefs.<br><br>**Marks:** 1 mark basic answer 2 marks for elaboration/example X2<br>**Note:** 0 marks for CBT unless fully justified. 0 marks for explanation with no reference to treatments. | **4** |
| 1(d) | **Discuss the strengths and weaknesses of using ECT for the treatment of depression. You should include a conclusion in your answer.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br><br>**Strengths:**<br>• it is a medical treatment, prescribed by and applied by medical doctors<br>• it is necessary for patients where all other medications have not worked<br>• it successfully treats many patients both with schizophrenia and depression<br><br>**Weaknesses**:<br>• how ECT works still isn't known<br>• ECT can be given to a person without their consent (they are not 'of sound mind')<br>• ECT has side-effects, both long and short term. Can include: loss of memory (temporary or worse) aspects of short-term or long-term memory. In people with other conditions it may affect the central nervous system and cardiovascular system.<br><br>**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.<br><br>**Marks:** Question requires **discussion;** always **plural** of each argument, and always requires conclusion.<br>1 mark for each advantage/disadvantage (however detailed) and related to the question up to 4 max. 2 marks max for two strengths/weaknesses unrelated to the question. 1 mark for conclusion. | **5** |

| Question | Answer | Marks |
|---|---|---|
| 2 | **A clothes company uses a pleasant odour in all their stores which is 'clean, subtle, simple and memorable'. Chebat and Michon (2003) conducted an experiment to investigate the effect of pleasant odour on shoppers, gathering data using questionnaires.** | |
| 2(a) | **Identify the conditions (levels) of the independent variable in the study by Chebat and Michon (2003).**<br><br>**Definitive answer**:<br>• scent condition (pleasant scent released every six minutes for 1 week)<br>• non-scent condition (where the shopping malls ambient olfactory atmosphere was not modified in any way).<br><br>**Marks:** 1 mark for identification of both conditions (scent and non-scent); 2 marks for elaboration/explanation of one (or both) of these. | **2** |
| 2(b)(i) | **Outline <u>one</u> variable that was controlled in this study.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br>• duration of study (1 mark) the study was conducted over two consecutive weeks: week 1 no ambient odour, week 2 pleasant citrus odour (2 marks)<br>• timing of study (1 mark) last week February, first week March (2 marks)<br>• situational variables (1 mark) all special promotions, etc. were cancelled for two weeks (2 marks).<br>• procedure: the citrus scent (1 mark) was released for 3 seconds every six minutes (2 marks)<br>• scent intensity (1 mark) odour intensity reached perceptual thresholds without bothering people (2 marks)<br>• students giving questionnaires instructed not to wear perfume (1 mark)<br><br>**Marks:** 1 mark for identification of control, 2 marks for elaboration/example | **2** |
| 2(b)(ii) | **Suggest <u>one</u> relevant variable that was <u>not</u> controlled in this study.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br>**Note:** allow anything that might not have been controlled<br>• the weather (1 mark) such as temperature might have affected the effectiveness/dispersal of the scent. (2marks)<br>• number of people in the mall (1 mark) more people may have masked the effectiveness of the scent (2 marks)<br><br>**Marks:** 1 mark for identification, 2 marks for elaboration/example. | **2** |

| Question | Answer | Marks |
|---|---|---|
| 2(c) | **Explain how <u>one</u> model of the 'effects of ambience' can explain the findings of this study.**<br><br>The two main models are as follows:<br>• **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 description)<br>**Related**: how the model relates to the findings: the pleasant odour/scent creates <u>pleasure</u> whereas the non-scent condition does not. (+1 mark) OR the pleasant odour/scent <u>arouses</u> whereas the non-scent condition does not (+1 mark).<br>• 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 description)<br>**Related**: how the model relates to the findings: the pleasant odour/ scent causes an emotional response which <u>arouses</u> whereas the non-scent condition does not (+1 mark).<br><br>**Marks:** 1 mark outline of model, +1 mark for relating the findings to the model. | **4** |

| Question | Answer | Marks |
|---|---|---|
| 2(d) | **Discuss the strengths and weaknesses of using questionnaires to assess the effects of odour on shoppers. You should include a conclusion in your answer.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br><br>**Strengths**<br>• questionnaires can include a wide range of pertinent items can be given to a potentially large number of participants<br>• questionnaires can provide quantitative data which may allow comparisons to be made with stores of the same type or other types<br>• questionnaires can provide qualitative data through open ended questions allowing a shopper to report in detail their experiences<br><br>**Weaknesses**<br>• shoppers may not answer the questions truthfully if the questionnaire is conducted in the store itself<br>• shoppers may respond to demand characteristics if completing the questionnaire in front of the store manager/worker<br>• questionnaires may only give quantitative data<br><br>**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.<br><br>**Marks:** Question requires **discussion;** always **plural** of each argument, and always requires conclusion.<br>1 mark for each advantage/disadvantage (however detailed) and related to the question up to 4 max. 2 marks max for two strengths/weaknesses unrelated to the question. 1 mark for conclusion. | **5** |

| Question | Answer | Marks |
|---|---|---|
| 3 | **Doctor: Where is your pain?**<br>**Patient: In my stomach.**<br>**Doctor: How painful is your pain?**<br>**Patient: It's really bad when it hurts.**<br>**Doctor: Can you describe how the pain feels, for example sharp or aching?**<br>**Patient: I don't know. It just feels really bad.** | |
| 3(a) | **Explain what is meant by a clinical interview.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br>An interview <u>between a medical practitioner and a person/patient</u> (1 mark)<br><u>Essential for 2 marks</u><br>face-to-face or telephone or online (+1 mark)<br>verbal and non-verbal exchange (+1 mark)<br>in a medical setting (+1 mark)<br>designed to diagnose symptoms, prescribe or assess treatment (1 mark)<br><br>**Marks:** 1 mark: any one from list A. 2 marks: any from list A plus list B. | **2** |

| Question | Answer | Marks |
|---|---|---|
| 3(b) | **Explain <u>two</u> communication skills that could be used during a clinical interview about pain.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br>• **verbal** anything the practitioner says to the patient and anything the patient says to the practitioner (1 mark) about their stomach pain (2 marks)<br>• **non-verbal** any behaviour exhibited by the patient indicating the pain (1 mark) they are in e.g. facial expression of distress, distorted ambulation, (rubbing or holding) their stomach (2 marks)<br>• **patient-centred style** with doctor listening to patient and answering their questions (1 mark) related to their stomach pain (2 marks)<br>• **communication skill** based on psychological evidence such as McKinlay or Ley. For example Ley suggesting how knowledge should be structured so patient can remember important instructions.<br><br>**Marks:** 1 mark for identification as indicated above; 2 marks for example X2 | **4** |
| 3(c) | **Explain <u>two</u> pain measures for children, other than a clinical interview.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br>pain measures for children:<br>• the Paediatric Pain Questionnaire (Varni and Thompson, 1976) gets children to pick colours and then colour a box – 'no hurt', 'a little hurt', 'more hurt' and 'a lot of hurt' – with a coloured pencil or crayon. The child then chooses the colour from the 'hurt boxes' to colour the part of the body that is hurting.<br>• the Wong-Baker scale (1987) and the children's comprehensive pain questionnaire (McGrath, 1987) uses pictures of smiley and sad faces. The child points to which face is most like theirs.<br>• any measure such as a visual rating scale example of box scale, verbal rating scale, or anything similar / can be used with children.<br><br>**Marks:** 1 mark for identification of measure, +1 mark for detailed answer/ elaboration X2<br>Note: 0 marks for MPQ (McGill Pain Questionnaire) because this is too complex for children. | **4** |

| Question | Answer | Marks |
|---|---|---|
| 3(d) | **Discuss the strengths and weaknesses of using a clinical interview to measure pain. You should include a conclusion in your answer.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br><br>**Strengths:**<br>• the patient knows how intense the pain is and the patient knows the type of pain they are experiencing, the practitioner does not<br>• the patient can explain and answer any question that may be asked<br>• the practitioner can use verbal and non-verbal skills to help diagnosis<br><br>**Weaknesses:**<br>• the patient uses vague terms such as 'it's really bad' and may not use words understood by a practitioner<br>• a clinical interview gives no precise indicator of the level of pain which a psychometric measure would (such as the MPQ)<br>• a patient may not know sufficient terminology to describe symptoms or have enough knowledge about where body parts are (heart attack mistaken for indigestion)<br><br>**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.<br><br>**Marks:** Question requires **discussion;** always **plural** of each argument, and always requires conclusion.<br>1 mark for each advantage/disadvantage (however detailed) and related to the question up to 4 max. 2 marks max for two strengths/weaknesses unrelated to the question. 1 mark for conclusion. | **5** |

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>4</td><td>Oldham and Brass (1979) investigated workers moving from a traditional to an open plan office. They assessed worker preferences at three different times, using questionnaires and interviews. Fig. 4.1 shows three of the variables that were measured in the experimental group.
<table>
<tr><th colspan="4">Mean scores for three variables at each time<br>(Questionnaire using seven-point scale)</th></tr>
<tr><th>Variables</th><th>Time 1 (T1)</th><th>Time 2 (T2)</th><th>Time 3 (T3)</th></tr>
<tr><td>Work satisfaction<br>Interpersonal satisfaction<br>Internal motivation</td><td>5.37<br>5.22<br>6.05</td><td>5.19<br>4.95<br>5.89</td><td>5.11<br>4.90<br>5.86</td></tr>
</table>
Fig. 4.1</td><td></td></tr>
<tr><td>4(a)</td><td>Give <u>two</u> findings from the data shown in Fig. 4.1.<br><br>Most likely answer (other appropriate responses to be credited):<br>• work satisfaction decreased from 5.37 to 5.19 to 5.11 (equivalent for other variables)<br>• all variables decreased across the three time periods; none increased (inc. numbers)<br>• interpersonal satisfaction decreased the most over time (6.05 to 5.86)<br>• any appropriate finding to be credited<br><br>Marks: 1 mark for each correct finding.</td><td>2</td></tr>
<tr><td>4(b)(i)</td><td>Suggest <u>one</u> strength of gathering data using a seven-point scale.<br><br>Most likely answer (other appropriate responses to be credited):<br>• responses from participants can be compared with responses from other participants on the same rating scale (1 mark) and so the effect of the open plan office can be measured (2 marks)<br>• data can be analysed statistically (1 mark) adding weight to the findings about open plan offices (2 marks)<br>• a 7-point scale allows a wide range of answers (1 mark) allowing the ratings of feelings about open plan offices to be assessed (2 marks)<br><br>Marks: 1 mark basic answer, 2 marks detailed answer/elaboration (as above)</td><td>2</td></tr>
</table>

| Question | Answer | Marks |
|---|---|---|
| 4(b)(ii) | **Suggest <u>one</u> weakness of gathering data using a seven-point scale.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br>• a 7-point scale includes a mid-point (neutral response) which might be used as an opt-out (1 mark) and so the effect of the open plan office cannot be measured (2 marks)<br>• neutral responses do not help researchers to draw conclusions. A forced six-point choice does not allow an opt out and a decision, even 51/49 one way or the other must be made (1 mark) if every worker chose the mid-point no useful data would be gathered about open plan offices. Forcing a choice would provide useful data about open plan offices (2 marks). | **2** |
| 4(c) | **Explain <u>two</u> problems reported in the interviews with workers about working in the open plan office.**<br><br>Most likely answer (other appropriate responses to be credited):<br>• employees did not like the open nature of the open plan office (1 mark) they described the new office space as a 'fishbowl,' 'cage,' or 'warehouse' (2 marks)<br>• an inability to concentrate (1 mark) e.g. because there is too much background noise; distractions from other workers (2 marks)<br>• inability to develop close friendships (1 mark) e.g. because there is no privacy in an open plan office (2 marks)<br>• inability to complete a job (1 mark) because there is too much background noise; distractions from other workers (2 marks)<br>• it was impossible in the open office to engage in a private conversation either with co-workers or with supervisors (1 mark) e.g. because there is no privacy in an open plan office (2 marks)<br><br>Marks: 1 mark for identifying problem +1 mark for explanation. X2<br>Note: answers must be from the study; this is not a *suggestion* question. | **4** |

| Question | Answer | Marks |
|---|---|---|
| 4(d) | **Discuss the strengths and weaknesses of using interviews to assess office preference in workers. You should include a conclusion in your answer.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br><br>**Strengths**<br>• using a structured interview allows the same questions to be asked to all participants<br>• using a semi structured interview allows different questions to be asked<br>• interviews can be done face-to-face or by telephone<br><br>**Weaknesses**:<br>• some participants may provide socially desirable responses; not give truthful answers; respond to demand characteristics<br>• researchers have to be careful about use of leading questions; it could affect the validity of the data collected<br>• detailed reasons can be provided by participants which may be difficult to record<br>• detailed reasons might be misinterpreted when transcribing answers<br><br>**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.<br><br>**Marks:** Question requires **discussion;** always **plural** of each argument, and always requires conclusion.<br>1 mark for each advantage/disadvantage (however detailed) and related to the question up to 4 max. 2 marks max for two strengths/weaknesses unrelated to the question. 1 mark for conclusion. | **5** |

| Question | Answer | Marks |
|---|---|---|
| | **Section B** | |
| 5(a) | **Design a study using an observation to investigate which are the <u>most</u> common compulsions in people with obsessive-compulsive disorder (OCD).**<br><br>**Marks:** use generic levels of response Design a study question part (a).<br>**Additional**: Candidates should design the study showing evidence of design features appropriate to the named method. The named method: **observation.**<br>**Specific features: Observations**: type, setting, response categories, sampling frame, number of observers.<br>**General features of research methodology**: sampling technique and sample, type of data, ethics, reliability, validity, data analysis. | **10** |
| 5(b) | **Explain the psychological and methodological evidence on which your study is based.**<br><br>**Marks:** use generic levels of response 'Design a study' question part (b).<br>NB If **only** methodological or psychological explanation is provided max 5 marks<br>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.<br>**Additional:** candidates are expected to justify their decisions or evidence presented regarding the design made in answer to question part **(a)**.<br>**Syllabus:** types of and common obsessions, common compulsions, hoarding and body dysmorphic disorder.<br><br>***Psychological**:*<br>Common compulsive behaviours include:<br>Repeatedly checking to make sure that doors and windows are locked or that appliances are turned off.<br>Excessive cleaning of the house, clothes, and/or body.<br>Counting objects, letters, words, or actions.<br>Doing routine activities repeatedly, like standing up or going up and down stairs.<br>Requesting or demanding reassurance from family members or health practitioners.<br>Repeating phrases or sequences of words either out loud or mentally.<br>Rearranging objects to ensure a specific order and/or symmetry.<br>Doing things in multiples: e.g. turning the light on and off three times.<br><br>***Methodological**:* explanation of method using general and specific features as above. | **8** |

| Question | Answer | Marks |
|---|---|---|
| 6(a) | **Design a study to investigate the effect of different store interior layouts on customer satisfaction.**<br><br>**Marks**: use generic levels of response Design a study question part (a).<br>**Additional:** Candidates should design the study showing evidence of design features appropriate to the named method. The named method is: **any appropriate method.**<br><br>**Specific features:**<br>• Experiments: type, IV, DV, controls, experimental design.<br>• Observations: type, setting, response categories, sampling frame, number of observers.<br>• Questionnaires/Interviews: type, setting, example questions. Scoring/rating scale, analysis of responses.<br><br>**General features of research methodology:** sampling technique & sample, type of data, ethics, reliability, validity, data analysis. | **10** |
| 6(b) | **Explain the psychological and methodological evidence on which your study is based.**<br><br>**Marks:** use generic levels of response 'Design a study' question part (b).<br>NB If **only** methodological or psychological explanation is provided max 5 marks<br>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.<br>**Additional:** candidates are expected to justify their decisions or evidence presented regarding the design made in answer to question part **(a)**.<br>**Syllabus:** store interior layout (Vrechopoulos, 2004)<br><br>***Psychological**:*<br>Vrechopoulos (2004) identified 3 types of interior store layout:<br>**Grid**: a rectangular arrangement of displays with long aisles that run parallel to one another.<br>**Free form**: arranges displays and aisles in a free-flowing and asymmetric pattern using different sizes, shapes, and styles of displays.<br>**Racetrack/boutique**: arrangement is in individual, semi-separate areas, each built around a theme to create an unusual, interesting and entertaining shopping experience.<br><br>***Methodological**:* explanation of method using general and specific features as above. | **8** |

| Question | Answer | Marks |
|---|---|---|
| 7(a) | **Design an experiment to investigate whether acupuncture is more effective than non-pain imagery for managing acute pain.**<br><br>Marks: use generic levels of response Design a study question part (a).<br>Additional: Candidates should design the study showing evidence of design features appropriate to the named method. The named method is: **experiment.**<br>**Specific features**: Experiments: type, IV, DV, controls, experimental design.<br>**General features** of research methodology: sampling technique and sample, type of data, ethics, reliability, validity, data analysis. | **10** |
| 7(b) | **Explain the psychological and methodological evidence on which your experiment is based.**<br><br>**Marks:** use generic levels of response 'Design a study' question part (b).<br>NB If **only** methodological or psychological explanation is provided max 5 marks<br>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.<br>**Additional:** candidates are expected to justify their decisions or evidence presented regarding the design made in answer to question part **(a)**.<br>**Syllabus:** alternative techniques (acupuncture, stimulation therapy/TENS)<br><br>***Psychological**:*<br>**Acupuncture** involves inserting into the skin a number of very fine stainless steel needles to stimulate the body's major meridians to increase the release of neurotransmitters called endorphins, which block pain.<br>**Non-pain imagery**, where a person tries to alleviate discomfort by creating or imagining a mental scene that is unrelated to or incompatible with the pain<br><br>***Methodological**:* explanation of method using general and specific features as above. | **8** |

| Question | Answer | Marks |
|---|---|---|
| 8(a) | **Design a study to investigate the extent to which the manager in a clothes factory demonstrates 'adaptive leadership'.**<br><br>**Marks**: use generic levels of response Design a study question part (a).<br>**Additional:** Candidates should design the study showing evidence of design features appropriate to the named method. The named method is: **any appropriate method.**<br>**Specific features:**<br>• Experiments: type, IV, DV, controls, experimental design.<br>• Observations: type, setting, response categories, sampling frame, number of observers.<br>• Questionnaires/Interviews: type, setting, example questions. Scoring/rating scale, analysis of responses.<br>**General features of research methodology:** sampling technique and sample, type of data, ethics, reliability, validity, data analysis. | **10** |
| 8(b) | **Explain the psychological and methodological evidence on which your study is based.**<br><br>**Marks:** use generic levels of response 'Design a study' question part (b).<br>NB If **only** methodological or psychological explanation is provided max 5 marks<br>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.<br>**Additional:** candidates are expected to justify their decisions or evidence presented regarding the design made in answer to question part **(a)**.<br>**Syllabus:** adaptive leadership (Heifetz, 1997)<br><br>***Psychological**:*<br>Heifetz (1997): features of adaptation: (i) adaptation builds on the past (ii) leadership is about change (iii) adaptation occurs through experimentation (iv) adaptation relies on diversity (v) new adaptations significantly displace, reregulate, and rearrange. (vi) adaptation takes time.<br><br>***Methodological**:* explanation of method using general and specific features as above. | **8** |

| Question | Answer | Marks |
|---|---|---|
| | **Section C** | |
| 9 | ***'Cognitive treatment for obsessive-compulsive and related disorders is <u>not</u> the solution. Biomedical treatment is the only solution.'***<br><br>**To what extent do you agree with this statement? Use examples of research you have studied to support your answer.**<br><br>**Marks:** use generic levels of response in table C.<br>**Syllabus:** Explanations of depression<br>**Most likely** (<u>any other appropriate responses should be credited</u>):<br><br>**Support biomedical**<br>• cognitive therapies need the person to be active and involved in the treatment. Many people prefer to be passive<br>• taking a drug is easy, quick and involves nothing more than swallowing a pill.<br>• drugs treat the symptom, not the cause. Why does the cause need to be known?<br><br>**Support cognitive**<br>• cognitive therapies need the person to be active, rather than passive, and involved in their own treatment. This is a good thing.<br>• taking drugs is addictive and long-term consumption will lead to addiction.<br>• cognitive theories determine the cause, faulty thinking and the person is taught how to think positively and to 'cure' their depression this way. | **12** |

| Question | Answer | Marks |
|---|---|---|
| 10 | ***'Different types of intuitive thinking, such as thinking fast and thinking slow, are of no value in understanding consumer decision-making.'***<br><br>**To what extent do you agree with this statement? Use examples of research you have studied to support your answer.**<br><br>**Marks:** use generic levels of response in table C.<br>**Syllabus:** thinking fast & thinking slow/system 1 and system 2 (Shleifer, 2012)<br>**Most likely** (any other appropriate responses should be credited):<br>**Note:** *candidates can choose any medium, question has television as example.*<br><br>**Are of value**<br>• thinking fast and thinking slow is the way the brain makes decisions and so studying it is of value<br>• studying thinking fast can help understand why some people make quick decisions and then later, thinking slowly, change their mind.<br>• thinking fast/slow involves cognitive biases and studying these is of prime importance to the seller because they can be used to 'manipulate the consumer.<br><br>**Are of no value**<br>• just because thinking fast and slow exist it doesn't mean they always apply to every decision each individual consumer makes.<br>• thinking fast and thinking slow is reductionist. There are many more factors involved when making a decision, such as retail atmospherics.<br>• the brain has already made a decision about a purchase even before a person can think fast. Pre-cognitive decisions (Knutson et al. (2007) are perhaps what should be studied. | **12** |

| Question | Answer | Marks |
|---|---|---|
| 11 | ***'Psychological techniques to manage stress are more effective than any medical technique.'***<br><br>**To what extent do you agree with this statement? Use examples of research you have studied to support your answer.**<br><br>**Marks:** use generic levels of response in table C.<br>**Syllabus:** psychological techniques: biofeedback (Budzynski et al., 1969) and imagery (Bridge, 1988)<br><br>**Most likely** (any other appropriate responses should be credited):<br><br>**Psychological more effective:**<br>• psychological techniques need the person to be active, rather than passive, and involved in their own treatment. This is a good thing.<br>• there is no addiction with psychological techniques. Taking drugs is addictive and long term consumption will lead to addiction.<br>• psychological techniques can be used for a range of different things, pain reduction for example.<br>• psychological techniques such as biofeedback and imagery can be applied by the person anywhere and any time.<br><br>**Medical more effective:**<br>• the use of drugs is quick and easy – simply swallow a pill and nothing else.<br>• drugs can help by relieving the associated symptoms of stress<br>• drugs do not need relaxation techniques, cognitive therapies or any other time-consuming exercises. | **12** |

| Question | Answer | Marks |
|---|---|---|
| 12 | ***'The methodology used in the Hawthorne studies is reductionist. This is the <u>best</u> way to study organisational working conditions.'***<br><br>**To what extent do you agree with this statement? Use examples of research you have studied to support your answer.**<br><br>**Marks:** use generic levels of response in table C.<br>**Syllabus:** physical: The Hawthorne studies (Wikstrom and Bendix, 2000)<br>**Most likely** (any other appropriate responses should be credited):<br><br>**Agree (reductionism good):**<br>• breaking down allows each factor to be studied in more detail (e.g. isolating IV and controlling other factors such as lighting)<br>• different factors should be broken down and controlled because they are different.<br>• reducing to one variable allows it to be studied more specifically to identify individual factors responsible before moving on to consider other variables.<br>• reductionism is the way of science, identifying cause and effect.<br><br>**Disagree (reductionism not good)**<br>• it is assumed that when isolated variables are studied (such as lighting) they affect all people in the same way. They might not, there are individual differences.<br>• being reductionist may exclude the role of other contributory factors; breaking down may not lead to a consideration of how each factor is inter-related with others<br>• reductionism may involve 'not seeing the wood for the trees' and so how everything fits together (holism) may be missed. | **12** |