Cambridge Assessment International Education

# Cambridge International AS and A Level

**PSYCHOLOGY** **9990/41**

Paper 4 Specialist Options: Application **May/June 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 May/June 2023 series for most Cambridge IGCSE, Cambridge International A and AS Level and Cambridge Pre-U components, and some Cambridge O Level components.



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**[Turn over**

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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 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.*

<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. Question always requires conclusion.<br>1 mark for each for/against argument (however detailed) up to 4 max. 1 mark for conclusion.<br>NB 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 |
| **NB:** 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. | | |
| 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 |
|---|---|---|
| 1(a) | **Obsessive-compulsive disorder (OCD) can be treated with biomedical treatments and it can be managed with psychological treatments. Biomedical treatments include the use of drugs such as SSRIs. OCD can be managed psychologically using exposure and response prevention.**<br><br>**Explain how SSRIs work when treating OCD.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br>It is assumed that OCD is caused by low levels of serotonin.<br>• it is thought that SSRIs work by increasing serotonin levels in the brain.<br>• serotonin is a neurotransmitter (a messenger chemical that carries signals between nerve cells in the brain). It's thought to have a good influence on mood, emotion and sleep.<br>• after carrying a message, serotonin is usually reabsorbed by the nerve cells (known as 'reuptake'). SSRIs work by blocking ('inhibiting') reuptake, meaning more serotonin is available to pass further messages between nearby nerve cells.<br><br>**Marks:** 1 mark basic answer; 2 marks elaboration/example. | **2** |
| 1(b)(i) | **Explain what is meant by an obsession, using an example.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br>**Explanation:** An obsession is a recurring and persistent thought that interferes with normal behaviour. (1 mark)<br>**NB**: 0 marks for 'thoughts' or 'obsessive thoughts'; 1 mark for repetitive/recurring thoughts<br><br>**Example:**<br>• fearing contamination from anything that is unclean<br>• fear of losing control<br>• fear of losing or not having things you might need.<br>• order and symmetry: the idea that everything must line up "just right".<br><br>**Marks:** 1 mark for explanation; 1 mark for example. | **2** |

| Question | Answer | Marks |
|---|---|---|
| 1(b)(ii) | **Explain what is meant by a compulsion, using an example.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br>**Explanation:** Compulsions or compulsive acts are repetitious, purposeful physical or mental actions that the individual feels compelled to engage in according to their own strict rules or in a stereotyped manner (1 mark)<br>**NB**: 0 marks for 'behaviours' or 'compulsive behaviours' or 'obsessive behaviours'; 1 mark for repetitive/excessive behaviours; 1 mark for 'when obsessions are acted upon'.<br><br>**Example**:<br>• excessive double checking of things such as doors, locks<br>• repeating counting, checking words<br>• excessive washing or cleaning<br>• accumulating things 'junk' (hoarding)<br><br>**Marks:** 1 mark for explanation; 1 mark for example.<br>**NB:** 0 marks for examples of impulse control disorders such as pyromania, kleptomania and gambling. | **2** |
| 1(c) | **Outline <u>one</u> case study where exposure and response prevention was used to treat OCD.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br>• **exposure and response prevention (ERP)** exposure means facing or confronting the feared stimuli and/or situations repeatedly until the fear associated with them subsides, and response prevention means not carrying out the compulsive, avoidant, or escape behaviour. ERP targets the behavioural component of CBT.<br>• Lehmkuhl et al. (2008), ERP was used to treat a 12-year-old boy. Jason experienced contamination fears, avoiding 'contaminated' items (e.g. door knobs, library books, etc.) He would not sit on chairs, turn pages with his hands, or touch papers that other children had touched. Jason attended ten 50-minute sessions over 16 weeks. Jason was exposed to items he avoided and over the sessions his anxiety dropped. After three months his Y-BOCS score remained low.<br><br>**Marks:** 1 mark basic answer (must include ERP and case study of OCD); 2–4 marks description of **ERP** with increasing detail and quality.<br>**NB:** 0 marks for 'Charles', (OCD but no ERP) or the boy with button phobia (Saavedra and Silverman, ERP but not OCD) | **4** |

| Question | Answer | Marks |
|---|---|---|
| 1(d) | **Discuss the strengths and weaknesses of using drugs to treat OCD. You should include a conclusion in your answer.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br><br>**Strengths**<br>• drugs easy to take; swallowing a pill<br>• drugs mean the patient is passive in their treatment (and advantage for many people)<br>• drugs have been shown to be effective in many studies<br><br>**Weaknesses**<br>• drugs are addictive so should be short-term use only<br>• drugs are effective for associated problems such as anxiety<br>• drugs ignore the role of alternative explanations of OCD (treat symptom, not cause)<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) | **Hall et al. (2010) conducted a field experiment using an opportunity sample at a supermarket to investigate choice blindness. Participants tasted jam or smelled tea. They were deceived in a number of ways during the study.**<br><br>**Explain what is meant by the term 'choice blindness'.**<br><br>**Most likely answer** (other appropriate responses to be credited): (from the study)<br>• choice blindness is the failure to recall a choice (1 mark) immediately after we have made that choice (2 marks)<br><br>**Marks:** 1 mark for basic answer; 2 marks for elaboration/explanation. | **2** |
| 2(b) | **Suggest <u>two</u> strengths of conducting field experiments, using examples from this study.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br>• the setting is natural / high ecological validity (1 mark) e.g. the study is conducted at a stall in a supermarket (2 marks)<br>• the participant behaves naturally because they do not know they are participating in a study (1 mark) e.g. the researchers explain they are testing the quality of food (2 marks)<br>• the task/request is congruous with the setting (1 mark) testing food (jam and tea) in a supermarket is a logical thing to do (2 marks)<br><br>**Marks:** 1 mark for strength, 2 marks for relating to this study ×2. | **4** |
| 2(c) | **Explain <u>two</u> ways in which the participants were deceived by the experimenters in this study.**<br><br>**Most likely answer (quotes from study)**<br>• They recruited the participants by asking them whether they were willing to take part in a 'quality control' test of the jam and tea assortment at the store.<br>• They presented themselves as being independent consultants contracted to survey the quality of the jam and tea assortment in the shop.<br>• Unknown to the participants, on certain trials, they used a card magic trick to covertly exchange one face for the other.<br>• They created two sets of 'magical' jars, lidded at both ends, and with a divider inside. These jars thus looked like normal containers, but were designed to hold one variety of jam or tea at each end, and could easily be flipped over to execute a switch.<br><br>**Marks:** 1 mark outline, 2 marks detailed answer/elaboration or use of example ×2. | **4** |

| Question | Answer | Marks |
|---|---|---|
| 2(d) | **Discuss strengths and weaknesses of using an opportunity sample in this study. You should include a conclusion in your answer.**<br><br>**Most likely answer** (other appropriate responses to be credited, such as eye movement patterns):<br><br>**Strengths**<br>• people who are 'readily available' can be chosen to participate<br>• people can be chosen who do not know they are in a study<br>• people can participate without informed consent<br>• a relatively large sample can be obtained easily IF reason given<br>• It is relatively quick and easy to do IF compared to other sampling techniques / reason why given<br><br>**Weaknesses**<br>• participants may chosen by researchers because of the way they look – experimenter bias<br>• participants may not be representative of the wider population<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** |

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| Question | Answer | Marks |
|---|---|---|
| 3(a) | **The five city project (Farquhar et al., 1985) was a large experimental field study of community health education for the prevention of cardiovascular (heart) disease. Selection of the five cities was based on eight criteria (constraints). Data was collected over a six-year period using physiological measures, such as testing blood pressure and analysing urine samples, and behavioural measures.**<br><br>**Explain what makes the main experimental design of this study independent measures.**<br><br>**Definitive answer** (other appropriate responses to be credited):<br>The design is independent measures because different communities participated in different conditions (1 mark). There were two independent treatment communities compared with three reference communities (2 marks)<br><br>**Marks:** 1 mark for definition; 1 mark for 'in this study'. | **2** |
| 3(b) | **Suggest why <u>two</u> of the selection criteria for the cities were important.**<br><br>**NB**: Answer is in two parts. In order to suggest why the selection criteria were important, the criteria need to be identified. 1 mark for identification and 1 mark for suggestion of 'why' ×2<br><br>Selection criteria from study (definitive)<br>1) location in northern California,<br>2) populations exceeding 30 000,<br>3) total population of the five cities exceeding 300 000 to provide sufficient statistical power to the experiment,<br>4) reasonable similarity of ethnic, socioeconomic and demographic characteristics,<br>5) relative independence from other cities (eliminating suburbs of larger metropolitan areas),<br>6) no shared newspaper or electronic media markets between treatment and control cities,<br>7) shared media markets between treatment cities (to decrease costs),<br>8) relative independence of the two treatment cities, despite allowance of some shared media services.<br><br>**Suggestion 'why'** (examples)<br>comparison would not be possible if the cities were different:<br>• if sample sizes were under 30 000 and over 30 000<br>• answer using any of the features above to support reason why.<br><br>**Marks:** 1 mark for identification ×2; 2 marks for elaboration/example ×2. | **4** |

| Question | Answer | Marks |
|---|---|---|
| 3(c)(i) | **Participants in randomly selected households were used in this study.**<br><br>**Suggest how this might have been done.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br>• using electoral registers (or equivalent) and putting every name into a hat and drawing out names (1 mark), each person in each of the five communities would be included in a very large hat (2 marks)<br>• using a computer to select a random sample (1 mark), the computer would select names from a register of all residents within each community (2 marks)<br><br>**Marks:** 1 mark for basic answer; 2 marks for elaboration/example. | **2** |
| 3(c)(ii) | **Explain why this random selection was important.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br>• because every individual in a target polulation had an equal chance of participating (1 mark) in the surveys and physiological tests (2 marks)<br>• it eliminates researcher bias (1 mark) because (any example, such as) choosing people from one specific region which may or may not be healthier than people from another (2 marks)<br><br>**Marks:** 1 mark for basic answer; 2 marks for elaboration/example. | **2** |

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| Question | Answer | Marks |
|---|---|---|
| 3(d) | **Discuss the strengths and weaknesses of using physiological measures to assess the validity of community health promotion projects. You should include a conclusion in your answer.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br><br>**Strengths**<br>• physiological data is objective and not open to bias or opinion by the participant (or misinterpretation by experimenter)<br>• the use of physiological recording devices provide consistent (reliable) measurement, e.g. a sphygmomanometer measures blood pressure on a standard scale<br><br>**Weaknesses**<br>• subjective (qualitative) data is important and should not be ignored by researchers<br>• physiological data can be correlational and so cause and effect cannot be assumed<br>• one measure of physiological functioning is reductionist; other measures should be taken also to be more thorough (holist)<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** |

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| Question | Answer | Marks |
|---|---|---|
| 4(a) | **A manager can motivate workers by giving a monetary reward for extra work or good performance. A manager can take money away for poor performance or for not meeting targets. However, giving or taking away money might not be the best motivator. Non-monetary reward systems might be much more effective motivators.**<br><br>**Explain what is meant by the term 'non-monetary reward system'.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br>• any example such as praise, recognition, respect, empowerment and sense of belonging identified (1 mark) with explanation (2 marks)<br>• an intrinsic reward system (1 mark) then example (2 marks)<br><br>**Marks:** 1 mark basic answer (simple description), 2 marks detailed answer/elaboration.<br>**NB**: 0 marks for 'non-monetary' as this is the question. | **2** |
| 4(b) | **Explain how <u>two</u> types of non-monetary reward can be used to motivate workers.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br>• **praise**: a simple 'well done' can often be all a worker needs to keep them happy and motivated. Praise needs to be done fairly and consistently to be effective (2 marks)<br>• **respect** gaining the respect ('respect is earned') of managers is a good psychological/intrinsic motivator (2 marks)<br>• **recognition**: respect and recognition both come from working hard, showing responsibility, leadership, organisation and other skills the organisation values (2 marks)<br>• **empowerment:** this is where a worker becomes stronger and more confident in what they do. It may come about as a result of completing a task, achieving a target (2 marks).<br>• **sense of belonging**: linked to organisational commitment this is where a worker, because they are valued, recognised and have respect, feels part of the organisation; they feel proud to part of (2 marks).<br><br>**Marks:** 1 mark basic answer (more than identification), 2 marks detailed answer/elaboration (as above) ×2 | **4** |

| Question | Answer | Marks |
|---|---|---|
| 4(c) | **Suggest how non-monetary rewards apply to <u>two</u> needs from Maslow's hierarchy.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br>• **self-actualisation**: realising potential; feeling fulfilment from work (1 mark) this results from praise, respect, recognition (2 marks)<br>• **esteem:** mastering skills, achieving status, having a need for achievement (1 mark) this results from praise (for good work having shown high levels of skill) respect (because of task competence) recognition (for high quality work) (2 marks)<br>• **social / love and belongingness:** the need for affiliation *at work* with work colleagues (1 mark) gaining respect and recognition from other workers; being part of a team (2 marks) **NB** this is *Organisations* so love and belongingness with friends, family and personal relationships receives no credit.<br><br>**NB:** 0 marks for **physiological** or **safety** needs (need money to buy food is incorrect; question is non-monetary).<br>**Marks:** 1 mark basic answer; 2 marks detailed answer/elaboration ×2 | **4** |
| 4(d) | **Discuss the strengths and weaknesses of using monetary reward systems to motivate workers. You should include a conclusion in your answer.**<br><br>**Most likely answer** (other appropriate responses to be credited):<br><br>**Strengths**<br>• many people are motivated extrinsically rather than intrinsically<br>• many people see intrinsic motivation as a secondary bonus after pay, bonuses and performance related pay<br>• some people see work as a means to an end, with family life being much more important rather than 'giving their life' to the organisation<br><br>**Weaknesses**<br>• non-monetary rewards are more important (Herzberg believers that motivational factors (satisfiers) – achievement, recognition, responsibility, advancement and growth are the causes of job satisfaction)<br>• low pay, etc. (hygiene factors) can cause job dissatisfaction and low motivation<br>• a sense of belonging to an organisation and good worker relationships are important; work becomes enjoyable with 'good workmates'<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 |
|---|---|---|
| 5(a) | **Patients with obsessive-compulsive disorder (OCD) can receive treatment with a therapist face-to-face or by telephone.**<br><br>**Design a study using a telephone interview to investigate whether face-to-face therapy is more effective for women with OCD than for men with 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 is: **telephone interview.**<br><br>**Specific features**: Questionnaires/Interviews: type, setting, example questions. Scoring/rating scale, analysis of responses.<br><br>**General features** of research methodology: sampling technique and sample, type of data, ethics, reliability, validity, data analysis. | **10** |

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| Question | Answer | Marks |
|---|---|---|
| 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><br>**Additional:** candidates are expected to justify their decisions or evidence presented regarding the design made in answer to question part **(a)**.<br><br>**Syllabus:** treatment and management of O-C and related disorders: psychological: cognitive (Lovell et al., 2006)<br><br>***Psychological****: (study abstract)*<br>**Objectives** To compare the effectiveness of cognitive behaviour therapy delivered by telephone with the same therapy given face to face in the treatment of obsessive compulsive disorder.<br>**Design** Randomised controlled non-inferiority trial.<br>**Setting** Two psychology outpatient departments in the United Kingdom.<br>**Participants** 72 patients with obsessive compulsive disorder.<br>**Intervention** 10 weekly sessions of exposure therapy and response prevention delivered by telephone or face to face.<br>**Main outcome measures** Yale Brown obsessive compulsive disorder scale, Beck depression inventory, and client satisfaction questionnaire.<br>**Results** Difference in the Yale Brown obsessive compulsive disorder checklist score between the two treatments at six months was – 0.55 (95% confidence interval – 4.26 to 3.15). Patient satisfaction was high for both forms of treatment.<br>**Conclusion** The clinical outcome of cognitive behaviour therapy delivered by telephone was equivalent to treatment delivered face to face and similar levels of satisfaction were reported.<br>***Methodological****:* explanation of method using general and specific features as above. | **8** |

| Question | Answer | Marks |
|---|---|---|
| 6(a) | **Colour can be associated with specific products, but colour can also be used where products are displayed in places such as supermarkets.**<br><br>**Design a study using an interview to investigate which colour is best for the display area for fruit and vegetables.**<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: **interview.**<br><br>**Specific features**: 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** |
| 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:** product colour and associative learning (Grossman and Wisenblit, 1999)<br>**Psychological***:* Colours are associated with many things. Washing machines and kitchen goods are white, associated with cleanliness. Colours such as red are associated with danger and green with safety. Worldwide brands are associated with specific colours such as cans of Coca-Cola being red. Green is often an indicator of freshness – many vegetables are green (but some are orange, yellow and other colours).<br>**Methodological***:* explanation of method using general and specific features as above. | **8** |

| Question | Answer | Marks |
|---|---|---|
| 7(a) | **Design a study to investigate the effectiveness of using pill counting compared to using biochemical tests to measure adherence to medical advice.**<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>**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 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><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><br>**Additional:** candidates are expected to justify their decisions or evidence presented regarding the design made in answer to question part **(a)**.<br>**Syllabus:** objective: pill counting (Chung and Naya, 2000) biochemical tests (Roth and Caron, 1978)<br>**Psychological***:* Pill counting: most likely Chung and Naya who developed track cap to record the number of pills leaving the pill dispenser. Candidates might simply suggest 'counting pills' and use anecdotal descriptions, or candidates may just use 'biochemical tests' without specifying what these are. Likely to describe some aspect of Roth and Caron, such as using blood and urine tests.<br>**Methodological***:* explanation of method using general and specific features as above. | **8** |

| Question | Answer | Marks |
|---|---|---|
| 8(a) | **Design a study using a questionnaire to investigate which type of cognitive limitation/error is the <u>most</u> common in a team of managers.**<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: **questionnaire.**<br><br>**Specific features**: 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><br>NB If **only** methodological or psychological explanation is provided max 5 marks<br><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><br>**Additional:** candidates are expected to justify their decisions or evidence presented regarding the design made in answer to question part **(a)**.<br>**Syllabus:** cognitive limitations and errors (Forsyth, 2006)<br>**Psychological***:* group decision-making often puts group members under substantial cognitive demands. As a result, cognitive errors can adversely affect group decision-making. Forsyth (2006) lists three types: **Sins of commission** – errors in the use of information such as belief perseverance and sunk cost bias. **Sins of omission** – ignoring useful information. This can include base rate bias: and the fundamental attribution error. **Sins of imprecision** such as relying on rules that over-simplify complex decisions.<br>***Methodological****:* explanation of method using general and specific features as above. | **8** |

| Question | Answer | Marks |
|---|---|---|
| 9 | ***'Biochemical techniques, such as the use of drugs, can treat all patients with schizophrenia effectively.'***<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:** biochemical (antipsychotics and atypical antipsychotics) and also electro-convulsive therapy, token economy (Paul and Lentz, 1977) and cognitive-behavioural therapy (Sensky et al., 2000)<br>**Most likely** (any other appropriate responses should be credited):<br><br>**Agree**<br>• drugs easy to take; swallowing a pill; drugs such as anti-psychotics and atypical anti-psychotics<br>• drugs mean the patient is passive in their treatment (and advantage for many people)<br>• drugs have been shown to be effective in many studies and the 'third generation drugs' such as aripiprazole have fewer side effects<br><br>**Disagree**<br>• drugs are addictive so should be short-term use only<br>• drugs may not be taken as prescribed (non-adherence) because of the side effects such as tardive dyskinesia<br>• drugs ignore the role of alternative explanations of schizophrenia (treat symptom, not cause) alternatives such as the cognitive approach (e.g. Frith) | **12** |

| Question | Answer | Marks |
|---|---|---|
| 10 | ***'Choice heuristics, such as availability and representativeness, are irrelevant in consumer decision-making when consumers make decisions about purchasing goods.'***<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:** choice heuristics: availability, representativeness<br>**Most likely** (any other appropriate responses should be credited):<br><br>**Are not irrelevant**<br>• heuristics are mental short cuts (rules of thumb) that commonly used in everyday life.<br>• studying heuristics (and also thinking fast and slow) can help understand why some people make quick decisions and then later change their minds.<br>• there are many heuristics (23 different have been listed) showing their importance about how decisions are made – and not just in relation to consumer behaviour.<br><br>**Are irrelevant**<br>• just because choice heuristics exist it doesn't mean they always apply to every decision each individual consumer makes.<br>• heuristics such as availability and representativeness are just two and so focus on these is reductionist. There are many more factors heuristics involved when making a decision such as anchoring<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 | ***'Fear arousal is the best strategy for promoting health.'***<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:** strategies for promoting health: fear arousal (Janis and Feshbach, 1953; Cowpe, 1989)<br>**Most likely** (any other appropriate responses should be credited):<br><br>**For (is best)**<br>• a little fear is worth it if health is improved. The ends justify the means.<br>• people are not really harmed, it just makes them think about things they don't want to think about.<br>• people can withdraw from experiment, stop reading or watching television<br>• if it works for some people then it is justified<br><br>**Against (is not best)**<br>• the strong fear appeal (in the Janis and Feshbach study) was not the most effective, so strong fear appeals should not be used<br>• it is not desirable to upset people; there are alternative strategies, such as providing information.<br>• no one should be distressed by any strategy form any source. If people want to be unhealthy that is their choice rather than being 'forced' to be healthy.<br><br>**Alternative**<br>• arousing fear is one thing, but people need to know what to do. Providing information is what is also needed. Cowpe (1989) used a combination of both approaches. | **12** |

| Question | Answer | Marks |
|---|---|---|
| 12 | ***'Setting goals will <u>not</u> motivate employees because need theories explain everything about motivation at work.'***<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:** goal-setting theory (Latham and Locke, 1984) need theories.<br>**Most likely** (any other appropriate responses should be credited):<br><br>**Agree (goal setting irrelevant)**<br>• goal setting does not meet Maslow's physiological need or Alderfer's existence need, so it is unimportant.<br>• goal setting is unimportant to McClelland's need for power or affiliation (it can help need for achievement)<br>• goal setting, it can be argued, helps the organisation to get work done not the individual<br>• goal setting often results in intrinsic motivation, not more money, and many workers work for pay / extrinsic reward.<br><br>**Disagree (goal setting good)**<br>• if goal setting is to work as a motivator, then goals need to be effective; they need to be 'SMART': Specific, Measurable, Attainable/agreed, Relevant/realistic and Time-bound. This means that goals can be set for each individual worker so each worker is successful and is motivated.<br>• goal setting and meeting targets can help the organisation as well as the individual.<br>• goal setting can be tailored to the individual needs of each worker, whatever their job, responsibility or skill level. | **12** |