UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

Pre-U Certificate

MARK SCHEME for the May/June 2011 question paper

for the guidance of teachers

9773 PSYCHOLOGY

9773/03 Paper 3 (Key Applications), maximum raw mark 120

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.

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UNIVERSITY of CAMBRIDGE
International Examinations

There are three types of question on this paper and for each applied option these are labelled **Section A**, **Section B** and **Section C**.

Section A includes short-answer questions and although each question is marked out of 3, each question has its own specific mark scheme.

Section B includes essay questions and although the indicative content varies for each question, the mark scheme for both question parts **(a)** and **(b)** is the same. It has to be to allow standardisation across the 5 options.

Section C is the application question and although the question will vary the mark scheme does not. This means that the mark schemes for **Section B** question parts **(a)** and **(b)** will appear once (immediately below) and not be repeated for each individual question, as will the mark scheme for **Section C** question parts **(a)** and **(b)**. Indicative content for each question appears after the mark schemes.

SECTION B question part (a)	
This mark scheme applies to questions 3 & 4, 8 & 9, 13 & 14, 18 & 19, 23 & 24	AO1=12
Quality of **description** and **depth of knowledge** is **impressive.** Description of **knowledge** (theories/studies) is **accurate, coherent and detailed**. Use of **terms** is **accurate** and use of psychological **terminology** is **comprehensive**. The **theories/studies** described are **wide-ranging**. **Understanding** (such as elaboration, use of example, quality of description) is **very good**. The answer is **competently structured** and **organised** (global structure introduced at start and followed throughout). Quality of **written communication** is **very good**.	10–12
Quality of **description** and **depth of knowledge** is **very good**. Description of **knowledge** (theories/studies) is **mainly accurate, coherent and reasonably detailed**. Use of **terms** is **mainly accurate** and use of psychological **terminology** is **competent**. The **theories/studies** described cover a **reasonable range**. **Understanding** (such as elaboration, use of example, quality of description) is **good**. The answer has **some structure** and organisation. Quality of **written communication** is **good**.	7–9
Quality of **description** and **depth of knowledge** is **competent.** Description of **knowledge** (theories/studies) is **often accurate, generally coherent but lacks detail**. Use of **terms** is **basic** and use of psychological **terminology** is **adequate**. The **theories/studies** described cover a **limited range**. **Understanding** (such as elaboration, use of example, quality of description) is **reasonable**. The answer is **lacking structure** or organisation. Quality of **written communication** is **adequate**.	4–6
Quality of **description** and **depth of knowledge** is **poor**. Description of **knowledge** (theories/studies) is **mainly inaccurate, lacks coherence and lacks detail**. Use of **terms** and use of psychological **terminology** is **sparse or absent**. The **theories/studies** described cover a **very limited range**. **Understanding** (such as elaboration, use of example, quality of description) is **poor**. The answer is **unstructured** and lacks organisation. Quality of **written communication** is **poor**.	1–3
No or irrelevant answer.	0

SECTION B question part (b)	
This mark scheme applies to questions 3 & 4, 8 & 9, 13 & 14, 18 & 19, 23 & 24	AO2=16
Any appropriate evaluative point to receive credit. Most likely: Evaluation of theory: Internal strengths and weaknesses. Theoretical issues: reductionism, determinism, ethnocentrism. Supporting/contradicting evidence. Comparisons and contrasts with alternative theory. Evaluation of research: Strengths and weaknesses of methods, sample, controls, procedure. Evaluation of and comparisons and/or contrasts with alternative approaches. Evaluation of issues and debates: Any relevant debate can be raised, such as: objective versus subjective data; snapshot versus longitudinal studies; extent of ecological validity; nature versus nurture; freedom versus determinism; reductionism versus holism. Issues can be raised such as ethics, validity, ethnocentrism, effectiveness, application to real life.	
Evaluation (balance of positive and negative points) is **comprehensive**. **Quality** and **depth of argument** (or comment) is **impressive**. Selection and range of **arguments** is **balanced** and **competently organised** into issues/debates, methods or approaches. **Effective use** of appropriate supporting **examples** which are **explicitly related** to the question. **Analysis** (valid conclusions that effectively summarise issues and arguments) is **evident throughout**. **Evaluation** is **detailed** and quality of **written communication** is **very good**. **Understanding** and usage of psychological concepts, issues, and approaches is **extensive.**	13–16
Evaluation (positive and negative points) is **very good**. **Quality** and **depth of argument** (or comment) is clear and **well developed**. Selection and range of **arguments** is **balanced** and **logically organised** into issues/debates, methods or approaches. **Good use** of appropriate supporting **examples** which are **related** to the question. **Analysis** (key points and valid generalisations) is **often evident**. **Evaluation** is **quite detailed** and quality of **written communication** is **very good.** **Understanding** and usage of psychological concepts, issues, and approaches is **competent**.	10–12
Evaluation (positive and negative points) is **good**. **Quality** and **depth of argument** (or comment) is **limited**. Selection and range of **arguments** may be **imbalanced** with **some organisation** into issues/debates, methods or approaches evident. **Limited use** of appropriate supporting **examples** which are **related** to the question. **Analysis** (key points and valid generalisations) is **sometimes evident**. **Evaluation** is **lacking in detail** and quality of **written communication** is **good.** **Understanding** and usage of psychological concepts, issues, and approaches is **adequate**.	7–9

Evaluation (positive and negative points) is **limited**. **Quality** and **depth of argument** (or comment) is **poor**. Selection and range of **arguments** is often **imbalanced** with **little or no organisation** into issues/debates, methods or approaches evident. **Sparse use** of appropriate supporting **examples** which are often **peripherally related** to the question. **Analysis** (key points and valid generalisations) is **sparse**. **Evaluation** is **lacking in detail** and quality of **written communication** is **good.** **Understanding** and usage of psychological concepts, issues, and approaches is **poor**.	4–6
Evaluation (positive and negative points) is **basic**. **Quality** and **depth of argument** (or comment) is **weak**. Selection and range of arguments is **imbalanced** with little or **no organisation** into issues/debates, methods or approaches evident. **Sparse or no use** of appropriate supporting **examples** which are **peripherally related** to the question. **Analysis** (key points and valid generalisations) is **barely discernible.** **Evaluation** is **severely lacking in detail** and quality of **written communication** is **poor.** **Understanding** and usage of psychological concepts, issues, and approaches is **weak**.	1–3
No or irrelevant answer.	0

SECTION C question part (a)	
This mark scheme applies to questions 5, 10, 15, 20, 25	AO2=8
In this question part candidates are free to suggest any way in which the assessment request could be investigated. This may be in the form of a number of suggestions for research, application or development of a theoretical approach, or it may be that candidates design their own study to investigate the assessment request. Such an approach can include any appropriate method. Each answer should be considered individually as it applies to the mark scheme.	
Suggestion is appropriate to the question and based **explicitly** on psychological knowledge. **Description** of applied knowledge is **accurate, coherent and detailed**. **Understanding** (such as elaboration, use of example, quality of description) is **very good**.	7–8
Suggestion is appropriate to the question and based on psychological knowledge. **Description** of applied knowledge is mainly **accurate, coherent and reasonably detailed**. **Understanding** (such as elaboration, use of example, quality of description) is **good.**	5–6
Suggestion is largely appropriate to the question and based largely on psychological knowledge. **Description** of applied knowledge is **often accurate, generally coherent but lacks detail**. **Understanding** (such as elaboration, use of example, quality of description) is **reasonable**.	3–4
Suggestion is mainly inappropriate to the question and vaguely based on psychological knowledge. **Description** of applied knowledge is mainly **inaccurate, lacks coherence and lacks detail**. **Understanding** (such as elaboration, use of example, quality of description) is **poor**.	1–2
No or irrelevant answer.	0

SECTION C question part (b)	
This mark scheme applies to questions 5, 10, 15, 20, 25	AO1=6
In this question part candidates are expected to justify their decisions or evidence presented regarding the suggestion(s) made in answer to question part **(a)**.	
Quality of explanation and **depth of argument** is i**mpressive.** **Description of knowledge is accurate, coherent and detailed**. Use of **terms** is **accurate** and use of **psychological terminology** is **comprehensive**. **Understanding** (such as elaboration, use of example, quality of description) is **very good.** The **issue** is **effectively explained** in relation to the topic area.	5–6
Quality of explanation and **depth of argument** is **competent.** **Description of knowledge is mainly accurate, coherent and reasonably detailed.** Use of **terms** is **mainly accurate** and use of **psychological terminology** is **competent**. **Understanding** (such as elaboration, use of example, quality of description) is **good**. The **issue** is **adequately explained** in relation to the topic area.	3–4
Quality of explanation and **depth of argument** is **poor.** **Description of knowledge is often accurate, generally coherent but lacks detail.** Use of **terms** is **basic** and use of **psychological terminology** is **adequate**. **Understanding** (such as elaboration, use of example, quality of description) is **poor**. The **issue** is **poorly explained** in relation to the topic area.	1–2
No or irrelevant answer.	0

Psychology and Abnormality

Section A

1 (a) Briefly describe the cognitive model of abnormality. [3]

Details of specification:
Models of abnormality: biomedical, behavioural, psychoanalytic and cognitive.

The cognitive model focuses on the thoughts and interpretations a person has about their life, their abilities and their future. People sometimes have faulty logic and they think negatively and this leads them to behave in dysfunctional ways. Assumptions of the cognitive model:

- Cognitive psychologists believe that thinking determines all behaviour and that dysfunctional behaviour is caused by inappropriate or faulty thought processes.
- Cognitive therapy involves helping a person to restructure their thoughts, helping them to think more positively about themselves, their life and their future.

Most likely model is Beck (1976). Beck believes that depression for example results from the negative cognitive triad, comprising unrealistically negative views about *self*, the *world* and the *future*. Typical comments would include 'I'm totally useless' and 'I can't see a future any more'.

3 marks: accurate explanation of the cognitive model with clear understanding.
2 marks: explanation of the cognitive model with some understanding.
1 mark: vague explanation of the cognitive model with little understanding.

(b) Describe <u>one</u> therapy for mental health disorders based on the cognitive approach. [3]

Most likely (but any other appropriate therapy to be credited):

Beck's (1979) cognitive restructuring. The aim is to restructure negative automatic thoughts, the biased information processing, with positive automatic thoughts. This is done in a six-stage process, starting with an explanation of the therapy itself. Next the person is taught to identify unpleasant emotions, situations in which these occur and associated negative automatic thoughts. Next the person is taught to challenge the negative thoughts and replace then with positive thoughts. Finally the person can begin to challenge the underlying dysfunctional beliefs before the therapy ends.

Ellis (1962) rational emotive (behaviour) therapy. Ellis focuses on how illogical beliefs are maintained through: A for the activating event, perhaps the behaviour or attitude of another person; B for the belief held about A; and C, which is the thoughts, feelings or behaviours resulting from A. Ellis describes the illogical or irrational beliefs using the terms musterbating (we *must* be perfect at all times) and I-can't-stand-it-itis (the belief that when something goes wrong it is a major disaster). In order to change to rational beliefs, Ellis expands the ABC model to include: D for disputing the irrational beliefs and E for the effects of successful disruption of the irrational beliefs.

Cognitive behaviour therapy

Ost and Westling (1995) investigated the effectiveness of **cognitive behavioural therapy** (CBT), in the treatment of panic disorder. The out-patients in their sample were treated over 12 weekly sessions. The results revealed a significant reduction in the number of panic attacks in the patients, who were also panic-free at the follow-up. They also found that the treatment led to reductions in generalised anxiety, depression and cognitive misinterpretations.

Sensky (2000) has used cognitive behavioural therapy in the treatment of schizophrenia. The participants, from clinics in London and the North of England, had schizophrenia for at least six months, despite drug treatment with chlorpromazine. After 45-minute sessions for at least two months with cognitive behavioural therapy, patients showed significant improvements. At the 9-month follow-up evaluation, patients who had received cognitive behavioural therapy continued to improve and the results could not be attributable to changes in prescribed medication. It was concluded that cognitive behavioural therapy is effective in treating negative as well as positive symptoms in schizophrenia.

Shapiro (1989) EMDR (eye movement desensitisation and reprocessing). Shapiro describes Eye Movement Desensitisation and Reprocessing (EMDR) as a structured treatment approach that is based on an information-processing model and includes elements of other psychotherapies, for example psychodynamic, cognitive behavioural, person-centred, body-based, and interactional therapies. These are then shaped into a standardised set of procedures and clinical protocols.

3 marks: accurate explanation of a cognitive-based therapy with clear understanding.
2 marks: explanation of a cognitive-based therapy with some understanding.
1 mark: vague explanation of a cognitive-based therapy with little understanding.

(c) Contrast the cognitive model of abnormality with the psychoanalytic model of abnormality. [3]

Details of specification:
Models of abnormality: biomedical, behavioural, psychoanalytic and cognitive.
Cognitive: inappropriate way of thinking about self.
Psychoanalytic: unconscious conflicts, childhood repressions and a weak ego.
Cognitive: people are conscious logical thinkers; unconscious irrelevant.
Psychoanalytic: unconscious and instinctive. Deterministic.
Cognitive: changes the way people think. Most likely cognitive behavioural therapy or cognitive restructuring or rational emotive therapy.
Psychoanalytic: psychoanalysis uncovers repressions and strengthens the ego.

Examples can be used from any topic area in the abnormality section.

3 marks: comparison and contrast with supporting examples.
2 marks: comparison or contrast with examples, or comparison and contrast but no examples.
1 mark: attempt at comparison or contrast with or without examples.

2 From the study by Simeon et al. on thirty cases of depersonalisation disorder:

(a) Give <u>three</u> reasons why depersonalisation disorder is not a rare disorder. [3]

In their article, Simeon et al. state that depersonalisation disorder is widely believed to be rare, mainly because data are sparse, patients do not necessarily report symptoms and so the disorder is not diagnosed by clinicians. However, they note that evidence from several reports suggests that depersonalisation is actually quite common, to the extent that it might be the third most common psychiatric symptom (behind anxiety and depression).

One study based on a sample of college students suggested that 46% experienced depersonalisation episodes once a year. Two-thirds of another sample of people who had experienced extreme danger reported episodes of depersonalisation. In another study based on a large sample of psychiatric in-patients, depersonalisation was experienced by 80%, while 12% reported chronic undiagnosed depersonalisation.

1 mark for each correct reason.

(b) Patients were assessed using the Dissociative Experiences Scale. Use an example to outline <u>one</u> strength of this scale. [3]

Features of the Dissociative Experiences Scale:
- 28 items
- 0–100mm visual analogue scale
- total score equals the mean of all items
- widely validated and replicated.

Strengths can include its validity, but also it is a visual scale and does not require participants to say anything. Its scale gives quantitative data allowing each patient to be compared with any other.

3 marks: strength with supporting examples.
2 marks: attempt at strength with examples.
1 mark: attempt at strength without examples.

(c) Comment on the effectiveness of treatments for dissociative disorder. [3]

Most likely answers will be based on the following:
- Most of the subjects of the study had previously received more than one treatment for psychiatric disorders, with the majority (N=21, 70%) receiving medication.
- The only medications that were reported to have benefited subjects suffering from depersonalisation were serotonin reuptake inhibitors and benzodiazepines. Notable improvement was only seen in five out of 12 (42%) fluoxetine trials and one out of three (33%) sertraline trials. No improvement was seen in either of the clomipramine trials.
- Only two out of nine (22%) subjects treated with benzodiazepines reported reductions in depersonalisation, although the remainder noted improvements with symptoms of anxiety and panic.
- Other medication classes that were trialled included: tricyclics [N=11], monoamine oxidase inhibitors [N=8], lithium [N=6], buspirone [N=4], antipsychotics [N=4], bupropion [N=3], stimulants [N=3], anticonvulsants [N=3], barbiturates [N=1], meprobamate [N=1] and doxepine [N=1]. None was considered beneficial.

- The majority of the subjects had undergone general psychotherapy (N=25, 83%). None reported that psychotherapy had contributed to a reduction in the symptoms of depersonalisation, although it did help subjects cope better with their depersonalisation.
- Other treatments used included:
  - cognitive behavioural/relaxation therapy – two subjects, one improved, one worsened
  - hypnosis – one subject, no change
  - acupuncture – one subject, no change
  - ECT – one subject who had previously undergone several unsuccessful trials with medication, no change.

3 marks: two or more points discussed which are clear and show understanding of relevant treatments.
2 marks: two or more points discussed which are brief and show some understanding OR one point is very good.
1 mark: vague assertions showing lack of discussion, understanding and knowledge of topic area.

Section B

3 (a) Describe explanations for depression. [12]

Details of specification:
Explanations of depression including the biomedical (e.g. monoamine neurotransmitters), psychoanalytic (e.g. Freud, 1917) and cognitive models (e.g. Beck's theory).

Indicative content:
Biological: depression also runs in families and the closer the genetic relationship, the more likely people are to be diagnosed with the disorder. Close family members – such as brothers, sisters, sons, daughters, fathers and mothers – share 50% of their genes. According to Oruc et al. (1998) first-degree relatives of people diagnosed with depression are two or three times more likely to be diagnosed with depression than those who are not first-degree relatives.

Behavioural: Lewinsohn (1974) believes that depression is caused by a lack of positive reinforcement. For example, if a person loses their job, there may be fewer opportunities for constructive behaviour and associated reward. Further, the person may engage in less social activity and the positive features of their lives decrease even more. This low rate of positive reinforcement can lead the person into a negative spiral towards depression.

Psychoanalytic: conflict between the id and the ego causes anxiety. The id is the source of selfish urges which can cause anguish, embarrassment and stress to a person, so they are repressed by the ego into the unconscious mind by defence mechanisms. One defence mechanism is displacement, meaning that anxiety may be displaced onto something else.

Cognitive: Beck (1976) believes that people react differently to aversive stimuli in the world because of the thought patterns that they have built up throughout their lives. Beck believes that schemas (core beliefs) are formed in early life. For example, if a person has developed a negative set of schemas they may include a *self-blame schema* which makes the person feel responsible for all the things in their life that go wrong or an *ineptness schema* that causes them to expect failure every time. These schemas and assumptions predispose the person to having negative automatic thoughts (NATs) but they will only surface if an event triggers them. When that happens, they are supported by cognitive errors, which are characteristic errors in the process of thinking that help to maintain the negative beliefs. Beck believes that depression results from the negative cognitive triad, comprising unrealistically negative views about *self*, the *world* and the *future*. Typical comments would include "I'm totally useless" and "I can't see a future any more".

(b) Evaluate explanations for depression. **[16]**

Any appropriate evaluative point to receive credit.

Most likely:
Evaluation of theory:
Internal strengths and weaknesses.
Theoretical issues: reductionism, determinism, ethnocentrism.
Supporting/contradicting evidence.
Comparisons and contrasts with alternative theory.

Evaluation of research:
Strengths and weaknesses of methods, sample, controls, procedure.
Evaluation of and comparisons and/or contrasts with alternative approaches.

Evaluation of issues and debates:
Any relevant debate can be raised, such as objective versus subjective data; snapshot versus longitudinal studies; extent of ecological validity; nature versus nurture; freedom versus determinism; reductionism versus holism. Issues can be raised such as ethics, validity, ethnocentrism, effectiveness, application to real life.

4 (a) Describe the key study by Tice et al. on impulse control. **[12]**

Key features of the study include:

- It has previously been suggested that emotional distress causes impulse controls to break down either because distress inhibits the individual's motivation or ability to exercise self-control or because the moods result in self-destructive intentions.
- Tice et al. suggested that people will submit to their impulses if they think that this will make them feel better in the short-term. They conducted three experiments that showed that subjects who believed that their bad mood was fixed did not give in to the urge to eat fattening snacks (Experiment 1), seek immediate gratification (Experiment 2) or procrastinate (Experiment 3).

(b) Evaluate the key study by Tice et al. on impulse control. **[16]**

Any appropriate evaluative point to receive credit.

Most likely:
Evaluation of theory:
Internal strengths and weaknesses.
Theoretical issues: reductionism, determinism, ethnocentrism.
Supporting/contradicting evidence.
Comparisons and contrasts with alternative theory.

Evaluation of research:
Strengths and weaknesses of methods, sample, controls, procedure.
Evaluation of and comparisons and/or contrasts with alternative approaches.

Evaluation of issues and debates:
Any relevant debate can be raised, such as objective versus subjective data; snapshot versus longitudinal studies; extent of ecological validity; nature versus nurture; freedom versus determinism; reductionism versus holism. Issues can be raised such as ethics, validity, ethnocentrism, effectiveness, application to real life.

Section C

5 My friend Andy has a fear of buttons! This is called koumpounophobia. It is becoming so bad that he has decided to go for treatment. But which treatment should he choose? Please will you help him by designing a study to find out which treatment for his phobia is best.

(a) Using your knowledge of psychology, design a study to investigate the effectiveness of different treatments for phobias. [8]

In this question part, candidates are free to suggest any way in which the assessment request could be investigated. This may be in the form of a number of suggestions for research, application or development of a theoretical approach, or it may be that candidates design their own study to investigate the assessment request. Such an approach can include any appropriate method. Each answer should be considered individually as it applies to the mark scheme.

(b) Explain the evidence on which your suggestion is based. [6]

In this question part, candidates are expected to justify their decisions or evidence presented regarding the suggestion(s) made in answer to question part **(a)**.

Candidates may suggest cognitive behavioural therapy, cognitive restructuring, rational emotive therapy. They may also suggest a therapy based on psychoanalysis or some simple behavioural strategy.

Psychology and Crime

Section A

6 (a) Outline Eysenck's 'personality' explanation of crime. [3]

H.J. Eysenck (1970, 1977) believed that individuals inherit a type of nervous system that affects their ability to learn from (or condition to) the environment. Using the EPQ/EPI he classified personalities into extraversion/introversion; neuroticism/stability and psychoticism. He then studied 156 prisoners and classified offenders by personality types.

Psychoticism: conmen having very low scores.

Neuroticism scores separate the violent and property offenders (low scores) from the inadequates and the residuals (high scores).

Extraversion scores distinguish between the violent and residual offenders (high scores) and the inadequates and property offenders (low scores).

3 marks: clear and concise description of Eysenck's explanation with good understanding.
2 marks: description of Eysenck's explanation with some understanding.
1 mark: vague description of Eysenck's explanation.

(b) Using examples, suggest why Eysenck's explanation is deterministic. [3]

Most likely:

- It is based on biology: individuals inherit a type of nervous system that affects their ability to learn from (or condition to) the environment.
- The type of nervous system determines personality. E.g. extraverts are chronically under-aroused and bored and are therefore in need of external stimulation to bring them up to an optimal level of performance. Introverts, on the other hand, are chronically over-aroused and jittery and are therefore in need of peace and quiet to bring them up to an optimal level of performance.
- If individuals cannot learn from the environment and the type of personality determines the type of criminal activity, then this rules out the possibility of any free will on the part of the individual.

3 marks: the candidate clearly understands what determinism is and provides two or more suggestions as to why Eysenck's explanation is deterministic. Appropriate examples are provided.
2 marks: the candidate has some understanding of what determinism is and provides one or two basic suggestions as to why Eysenck's explanation is deterministic. Appropriate examples are provided but lack clarity.
1 mark: the candidate lacks understanding of what determinism is although provides a suggestion as to why Eysenck's explanation is deterministic. Weak examples may or may not be provided.

(c) Suggest <u>three</u> weaknesses with Eysenck's Personality Questionnaire/Inventory (EPQ/EPI). [3]

EPQ/EPI:

- Each question requires a forced choice yes or no answer, e.g. 'would being in debt worry you?'
- Many questions are repetitions of each other, e.g. 'life into a dull party'; 'can get party going'.
- Too many questions on long form; some questions are out of date.
- Lie-detector questions are ambiguous. 'Are all your habits good and desirable ones?' Mine are!

Any other appropriate answer for either to receive credit.

1 mark for each appropriate weakness.

7 From the study by Salfati on expressiveness and instrumentality in homicide:

(a) Using examples, explain what is meant by the expressive and instrumental behaviours of homicide crime scenes. [3]

Expressive behaviours rely on the idea of the victim as a specific person. Such behaviours, which include stabbing and gunshot wounds, suggest that the offender needs to separate themselves from their victim and the crime scene. According to Fesbach (1964), Toch (1969), and Cornell et al. (1996), the purpose of an expressive attack is to harm the victim specifically.

Instrumental behaviours are not directed at the victim as a person but instead enable the offender to reach an ulterior goal, e.g. sex or money, as Fesbach (1964), Toch (1969), and Cornell et al. (1996) point out. The offender has usually not come prepared for violence, so behaviours are 'manual', e.g. strangling, hitting and kicking.

3 marks: detailed, accurate description of expressive and instrumental with understanding and appropriate examples.
2 marks: description of expressive and instrumental with some understanding and appropriate examples.
1 mark: identification of expressive and/or instrumental with limited understanding and poor examples.

(b) Salfati analysed data using the smallest space analysis (SSA). Using an example, briefly describe this technique of data analysis. [3]

Smallest Space Analysis (SSA) was used to analyse 247 files from British homicides that involved one victim and one offender and that dated from the 1970s through to the early 1990s.

- SSA uses non-metric multidimensional scaling analysis.
- It enables the co-occurrence of every variable with every other variable to be examined.
- The null hypothesis is that there is no clear relationship between any of the variables.
- Association coefficients are calculated between each variable with all other variables.
- The coefficients are used to plot variables so a spatial representation is formed of the relationship between them.
- The points representing variables that co-occur more frequently during homicide will be closer together in the SSA space.

3 marks: detailed, accurate description of SSA with understanding and appropriate example.
2 marks: description of SSA with some understanding and appropriate example.
1 mark: identification of SSA with limited understanding and vague or no example.

(c) Salfati suggests that a holistic approach is much more useful than a reductionist approach. Giving reasons, suggest whether you agree or disagree with this viewpoint. [3]

To agree or to disagree is acceptable. It is the arguments put forward that receive credit.

Salfati suggests holistic because:

- The underlying structure, or system of behaviour, will most readily be appreciated if the relationship between every variable and every other variable is examined.
- Taken singularly and out of context of the other behaviours, these components suggest that there are certain behaviours that could be interpreted differently. However, by interpreting the actual meaning of these behaviours in relation to other behaviours with which they co-occur, the thematic meaning of not only the behaviour, but also of each of the two subgroups (Expressive and Instrumental), procures a more subtle definition than has been previously suggested.
- Indeed the whole idea is that one needs to consider every aspect of every event in relation to every aspect of every other event if one is to spot patterns, trends, etc. If each event is analysed individually then any attempt to categorise or even profile is impossible.

3 marks: two or more reasons clearly argued that support the candidate's viewpoint and show good understanding.
2 marks: one or two reasons presented that support the candidate's viewpoint and show some understanding.
1 mark: minimal reason/s presented that support the candidate's viewpoint but have limited understanding.

Section B

8 (a) Describe the key study by Rubin et al. on the London bombings of 2005. [12]

Rubin et al.'s study assessed the impact on the population of London of the bombings in London on 7 July 2005 in terms of a) stress levels and b) travel intentions.

They used a cross-sectional telephone survey, using random digit dialling, to request interviews with a sample of adults about their current stress levels and travel intentions. The interviews took place between 18 and 20 July 2005 and there were 1010 participants (10% of those eligible who were contacted).

The main findings were:

- 31% of participants reported that they were suffering from considerable stress (Rubin et al. used the same tool to measure levels as that used to measure the emotional impact of 11 September 2001 on the population in the USA)
- 32% reported that they planned to travel less
- only 12 participants (1%) reported a desire for professional help to deal with their emotional response to the bombings.

Factors associated with elevated stress levels:

- difficulty contacting family and friends by mobile phone (odds ratio 1.7, 95% confidence interval 1.1 to 2.7)
- participants thinking they might have been injured or killed (odds ratio 3.8, 95% confidence interval 2.4 to 6.2)
- being Muslim (odds ratio 4.0, 95% confidence interval 2.5 to 6.6).

Factors associated with lower stress levels:

- being white (odds ratio 0.3, 95% confidence interval 0.2 to 0.4)
- having previous experience of terrorism (odds ratio 0.6, 95% confidence interval 0.5 to 0.9).

(b) Evaluate the key study by Rubin et al. on the London bombings of 2005. [16]

Any appropriate evaluative point to receive credit.

Most likely:
Evaluation of theory:
Internal strengths and weaknesses.
Theoretical issues: reductionism, determinism, ethnocentrism.
Supporting/contradicting evidence.
Comparisons and contrasts with alternative theory.

Evaluation of research:
Strengths and weaknesses of methods, sample, controls, procedure.

Evaluation of issues and debates:
Any relevant debate can be raised, such as objective versus subjective data; snapshot versus longitudinal studies; extent of ecological validity; nature versus nurture; freedom versus determinism; reductionism versus holism. Issues can be raised such as ethics, validity, ethnocentrism, effectiveness, application to real life.

9 (a) Describe theory and research on the psychology of investigation. [12]

Details of specification:
Theory:
- Interrogation tactics (e.g. Minimization and Explicit offer of leniency)
- Detecting lies and deceit (e.g. Vrij, 2000)
- False confessions (e.g. coerced compliance, coerced internalization)

Research: Investigating true and false confessions (Russano et al., 2005). Police interrogations and confessions (Kassin and McNall, 1991).

Key Study: Mann, S., Vrij, A. and Bull, R. (2002) Suspects, lies, and videotape: An analysis of authentic high-stake liars. Law and Human Behaviour, 26 (June), 365–376.

Applications: Statement Validity Assessment. The Cognitive Interview Technique (Geiselman, 1984). Police and Criminal Evidence (PACE) Act 1984.

(b) Evaluate theory and research on the psychology of investigation. [16]

Any appropriate evaluative point to receive credit.

Most likely:
Evaluation of theory:
Internal strengths and weaknesses.
Theoretical issues: reductionism, determinism, ethnocentrism.
Supporting/contradicting evidence.
Comparisons and contrasts with alternative theory.

Evaluation of research:
Strengths and weaknesses of methods, sample, controls, procedure.
Evaluation of and comparisons and/or contrasts with alternative approaches.

Evaluation of issues and debates:
Any relevant debate can be raised, such as objective versus subjective data; snapshot versus longitudinal studies; extent of ecological validity; nature versus nurture; freedom versus determinism; reductionism versus holism. Issues can be raised such as ethics, validity, ethnocentrism, effectiveness, application to real life.

Section C

10 You are a behaviourist and you believe that all behaviours are learned. You also believe that offenders should be treated rather than merely imprisoned. You have been given the opportunity to work in a prison and you want to find out if your behavioural techniques are effective in preventing offenders from re-offending.

(a) Using your knowledge of psychology, design a study to test the effectiveness of behavioural techniques with offenders. [8]

In this question part, candidates are free to suggest any way in which the assessment request could be investigated. This may be in the form of a number of suggestions for research, application or development of a theoretical approach, or it may be that candidates design their own study to investigate the assessment request. Such an approach can include any appropriate method. Each answer should be considered individually as it applies to the mark scheme.

(b) Explain the evidence on which your suggestion is based. [6]

In this question part, candidates are expected to justify their decisions or evidence presented regarding the suggestion(s) made in answer to question part **(a)**.

Candidates should know about behaviourism, and they should also know about behavioural treatments for offenders. To quote the specification: Behavioural Treatments (e.g. aversion therapy and covert sensitization). Candidates also know about a range of different methods and various issues and debates applicable to their suggestion.

Psychology and Environment

Section A

11 (a) Outline <u>one</u> way in which personal space distances have been categorised. [3]

Edward Hall (1963) outlined 4 zones of personal space:

Zone	Near phase (cm)	Far phase (cm)
Intimate	0–15	15–45
Personal	45–75	75–120
Social	120-200	200-350
Public	350–700	>700

3 marks: all four zones accurately described and distances indicated.
2 marks: all four zones identified but description lacking, OR one or two zones described fully.
1 mark: for vague description of one or two zones.

(b) Describe <u>one</u> study on cultural differences in personal space that has used the simulation method to measure personal space. [3]

Little's 1968 study of cultural differences in 19 different social situations. The sample consisted of Americans, Swedes, Greeks, Italians and Scots, both male and female. Examples of the social situations participants had to assess included:

- two good friends talking about something pleasant
- a shop owner and his assistant having a conversation about the weather
- two people discussing the best place to shop
- two strangers discussing an unpleasant topic.

Each participant was asked to place dolls to indicate where they would stand in each scenario.

3 marks: clear and concise description of an appropriate study.
2 marks: reasonable description of an appropriate study.
1 mark: vague description of an appropriate study.

(c) Suggest <u>three</u> differences between the simulation method of measuring personal space and the stop-distance method. [3]

Most likely (other appropriate answers to receive credit):
- Simulation method involves use of dolls (or figures) often on paper, whereas the stop-distance method uses real people (ecological validity).
- Simulation method involves artificial measures (e.g. dolls 2 cm apart) whereas the stop-distance method involves actual measures (e.g. the actual distance one person stops away from another).
- Simulation method is entirely ethical; stop-distance should be ethical, but it may begin to invade space.
- Simulation method involves no feelings towards another person; no attraction or otherwise. The stop-distance can be influenced by attraction or otherwise for the person.

1 mark: each appropriate difference (3 marks max).

12 (a) Give <u>three</u> reasons why psychologists study catastrophes. [3]

Most likely (other appropriate answers to receive credit):
- So can learn and help design evacuation messages to prevent same from happening again.
- So can learn how to design buildings, aircraft, etc so people can evacuate quickly and safely.
- So can learn how people behave in emergency situations.
- So can learn which support/trauma services to provide.

1 mark: each appropriate reason (3 marks max).

(b) Suggest <u>one</u> advantage and <u>one</u> disadvantage of the laboratory study on catastrophe by Mintz. [3]

Mintz study: group of participants with string attached to cone in a bell jar. On command participants try to remove their cone before the jar fills with water. Mostly no participant 'escapes' because they all try to be first out of the jar.

Most likely (other appropriate answers to receive credit):
Advantage: controlled environment.
Advantage: study is ethical.
Advantage: participants in no danger.
Disadvantage: study is low in ecological validity as it is not a real-life emergency.
Disadvantage: can't generalise from lab study pulling string.
Disadvantage: gathers quantitative data. Still not known why people behave as they do.

1 mark: contextualisation of answer.
1 mark: advantage.
1 mark: disadvantage.

(c) Of the three main methods used to investigate behaviour in emergencies (laboratory studies, simulations and real-life events), suggest which one you think is the most appropriate and give <u>three</u> reasons to support your suggestion. [3]

Suggestion cannot be wrong!

Reasons will include:

- laboratory environment compared with simulation/real-life
- laboratory study is likely to be an artificial task; simulation could be more realistic
- laboratory study is ethical as is simulation
- laboratory studies and simulations gather quantitative data
- real-life events gather qualitative data; people explain their behaviour in an actual event

1 mark: each appropriate reason (up to 3 max).

Section B

13 (a) Describe the key study by Aginsky et al. on strategies for learning a route in a driving simulator. [12]

Key features of the study by Aginsky et al.:

- Dominant theory in study of human navigation was the stage theory, based on idea that individuals acquire three distinct types of spatial knowledge sequentially – landmark, route and survey knowledge.
- Aginsky et al.'s results from a route-learning experiment using a driving simulator enabled them to put forward an alternative theory. They suggested that an individual will follow either a visually-dominated or a spatially-dominated strategy to solve a route-learning problem.
- Visually-dominated strategy: subjects visually recognised decision points along the route but these decision points were not incorporated into any kind of survey map.
- Spatially-dominated strategy: from the outset these subjects represent the environment as a survey map, so they do not pass through the landmark or route stages proposed by the stage theory.
- Recent neurophysiological studies of animals solving maze problems have allowed researchers to identify different cortical areas activated during such tasks and it is suggested that the visually-dominated and spatially-dominated strategies are subserved by these different cortical areas.

(b) Evaluate the key study by Aginsky et al. on strategies for learning a route in a driving simulator. [16]

Any appropriate evaluative point to receive credit.

Most likely:
Evaluation of theory:
Internal strengths and weaknesses.
Theoretical issues: reductionism, determinism, ethnocentrism.
Supporting/contradicting evidence.
Comparisons and contrasts with alternative theory.

Evaluation of research:
Strengths and weaknesses of methods, sample, controls, procedure.
Evaluation of and comparisons and/or contrasts with alternative approaches.

Evaluation of issues and debates:
Any relevant debate can be raised, such as objective versus subjective data; snapshot versus longitudinal studies; extent of ecological validity; nature versus nurture; freedom versus determinism; reductionism versus holism. Issues can be raised such as ethics, validity, ethnocentrism, effectiveness, application to real life.

14 (a) Describe explanations of, and research on, crowd behaviour. [12]

Details of specification:
Theory:
- Definitions of crowds
- Types of crowd (Brown, 1965: acquisitive, baiting (Mann, 1981), panicky, apathetic, peaceful)
- Explanations of crowd behaviour: Emergent norm (Turner, 1972) Deindividuation (Zimbardo, 1969) Social Identity theory (Reicher, 1984)

Research: Studies on individuation and deindividuation: laboratory (e.g. Zimbardo, 1969 and field studies Diener et al., 1976). Johnson and Downing (1979) Social identity theory (Reicher 1984b St Pauls riots).

Key Study: Diener, E., Fraser, S. C., Beaman, A. L. and Kelem, R. T. (1976) Effects of deindividuation variables on stealing among Halloween trick-or-treaters. Journal of Personality and Social Psychology, Volume 33, Issue 2, February 1976, Pages 178–183.

Applications:
- Controlling potentially aggressive crowds (e.g. Waddington, 1987)
- Individuating using CCTV (e.g. Ainsworth and Pease, 1987)

(b) Evaluate explanations of, and research on, crowd behaviour. [16]

Any appropriate evaluative point to receive credit.

Most likely:
Evaluation of theory:
Internal strengths and weaknesses.
Theoretical issues: reductionism, determinism, ethnocentrism.
Supporting/contradicting evidence.
Comparisons and contrasts with alternative theory.

Evaluation of research:
Strengths and weaknesses of methods, sample, controls, procedure.
Evaluation of and comparisons and/or contrasts with alternative approaches.

Evaluation of issues and debates:
Any relevant debate can be raised, such as objective versus subjective data; snapshot versus longitudinal studies; extent of ecological validity; nature versus nurture; freedom versus determinism; reductionism versus holism. Issues can be raised such as ethics, validity, ethnocentrism, effectiveness, application to real life.

Section C

15 More and more reports of commuter stress on crowded trains are appearing in the media. But it is not only those who travel by train. Travelling to work or school by bus can be just as stressful.

(a) Using your knowledge of psychology, design a study to investigate the effects of crowding on public transport. [8]

Indicative content:
In this question part candidates are free to suggest any way in which the assessment request could be investigated. This may be in the form of a number of suggestions for research, application or development of a theoretical approach, or it may be that candidates design their own study to investigate the assessment request. Such an approach can include any appropriate method. Each answer should be considered individually as it applies to the mark scheme.

(b) Explain the evidence on which your suggestion is based. [6]

Indicative content:
In this question part candidates are expected to justify their decisions or evidence presented regarding the suggestion(s) made in answer to question part **(a)**.

Candidates may consider a physiological measure such as recording blood pressure (e.g. the Jamner, 1991 study). They may consider a physiological measure such as analysis of urine samples (e.g. Lundberg (1976) who measured stress on a commuter train). They may suggest use of a self-report questionnaire (e.g. based on Kanner's daily hassles).

Psychology and Health

Section A

16 (a) Briefly describe the fear appeal approach used in the study by Leventhal et al. [3]

Leventhal et al. gave a sample of smokers fear-arousing information about the dangers of smoking. They varied three factors:

- the intensity of fear stimulus – whether it was moderate or high
- whether instructions on how to stop smoking were given to participants or not
- some participants were instructed to smoke while they were being informed about the dangers of smoking.

Outcomes:

- Participants receiving the high-fear stimulus reported a greater desire to stop smoking but this did not actually have an effect on smoking behaviour.
- Participants receiving the instructions on how to stop smoking did not report any changes in their desire to stop smoking. However, the instructions were highly successful in getting these participants to alter their smoking behaviour.

3 marks: clear and concise description of study with understanding.
2 marks: reasonable description of study with some understanding.
1 mark: vague description of study which has limited or no understanding.

(b) Briefly describe the 'providing information' approach used in the study by Lewin et al. [3]

Lewin et al.'s study tested the Heart Manual in a major trial from 1988-91, the results of which were published in The Lancet. There were two groups: a Heart Manual group and a control group. Subjects from the sample of 176 patients were randomly allocated to each group and assessed at six months and one year.

The two groups were treated in exactly the same way apart from the following:

- Participants in the Heart Manual group received the Heart Manual.
- Participants in the control group received health education literature that included the same information but that was drawn from a variety of different sources.

Clinical staff did not know which group the participants belonged to.

Key findings were:

- fewer subjects in Heart Manual group re-admitted to hospital in first six months
- less contact with GPs in first year by subjects in Heart Manual group
- improvements in psychological adjustment of participants in the Heart Manual group at one year
- compared with the control group, those Heart Manual patients who had been diagnosed as clinically anxious or depressed when they were discharged from hospital displayed greater reductions in levels of anxiety or depression
- almost all subjects found the Heart Manual acceptable.

3 marks: clear and concise description of study with understanding.
2 marks: reasonable description of study with some understanding.
1 mark: vague description of study which has limited or no understanding.

(c) Using examples, suggest whether a longitudinal or snapshot method is more useful for assessing the effectiveness of health promotions. [3]

Most likely (other appropriate answers to receive credit):
Snapshot: study done in short time period, maybe 1 day or 1 hour (e.g. Leventhal study).

Longitudinal: study done over a period of time. Initial programme followed by follow-up. (e.g. Lewin study).

Snapshot: gives immediate feedback. People leaving study *say* they will change behaviour (e.g. Leventhal).

Longitudinal: data take time to be gathered but are more likely to be behavioural (e.g. Lewin).

3 marks: suggestion that has understanding and a number of supporting arguments and examples.
2 marks: suggestion that has some supporting arguments and some examples.
1 mark: vague suggestion that has limited supporting arguments and examples.

17 (a) Outline <u>one</u> piece of research that measures stress physiologically. [3]

Most likely (other appropriate answers to receive credit):

Jamner et al. measured ambulatory blood pressure and heart rate responses in 33 male paramedics over the course of a 24-hour work shift to investigate the impact of episodes of occupational stress on both cardiovascular responses and reports of stress by the subjects. The researchers wanted to study, in a natural setting, how cardiovascular responses were affected by the interplay between differences in each individual's 'cynical hostility and defensiveness' and the demands posed by different situations.

Key findings:

- There was a significant relationship between levels of defensiveness and cynical hostility that allowed prediction of subjects' heart rate responses in different situations.
- For example, in a situation involving interpersonal conflict in a hospital setting, heart rate responses were approximately 10 bpm higher for subjects displaying high levels of defensiveness and hostility than for those who were high in hostility but low in defensiveness.
- Diastolic blood pressure was subject to the same pattern of relationships.
- Daily mean levels of ambulatory blood pressure, measured during awake and sleep periods, differed between subjects who displayed high levels of hostility and those who displayed low levels.
- The findings, obtained in a natural setting, support the suggestion that levels of cynical hostility are significant when predicting cardiovascular responses.
- The results for defensiveness indicate the need for further research into the effects of different attitudes on cardiovascular diseases.

3 marks: accurate description of study with understanding.
2 marks: mainly accurate description of study with some understanding.
1 mark: weak description of study with limited or no understanding.

(b) Comment on the validity of physiological measures of stress. [3]

Most likely (other appropriate answers to receive credit):
For: physiological measures determine that 'stress hormones' are present in the system.
Against: just because there are 'stress hormones' present, it does not mean it is known what has caused them to be there.
For: if a situation occurs (e.g. paramedics in the Jamner study) and 'stress hormones' are present then it is more likely that there is cause and effect.
Against: just because there is a correlation between events, it does not mean that one causes the other.

Against: first time count is taken patient may be caught out but can 'trick' count on future attempts to measure.

3 marks: range of appropriate arguments presented, each clear. Likely to be supporting evidence; clear understanding of validity.
2 marks: appropriate arguments presented, possibly with supporting evidence; clear understanding of validity.
1 mark: appropriate answer but poor arguments, little or no supporting evidence and little or no understanding of validity.

(c) Contrast physiological measures of stress with psychological measures of stress. [3]

Most likely (other appropriate answers to receive credit):

- **Physiological measures** can be said to be more scientific because they are biologically based. Data are objective because they are gathered using a 'scientific' recording device. Data are quantitative. Likely to be less influence of other variables, but no explanation of what is causing the stress.
- **Psychological measures** are less scientific because there is no physiology recorded, rather a self-report questionnaire is used which is subjective, can be influenced by demand characteristics and socially desirable responses. May give an explanation for the stress.

1 mark: each appropriate contrast up to max 3 but can be 3 marks for fewer contrasts providing answer is thorough.

Section B

18 (a) Describe research into non-adherence to medical requests. [12]

Details of specification:
Theory:
- Definitions of adherence
- Extent of non-adherence (Barat, 2001)
- Reasons for non-adherence: rational non-adherence (Bulpitt, 1988)
- Theory of reasoned action (Fishbein and Ajzen, 1975)

Research: Measuring non-adherence: pill devices (Chung and Naya, 2000) Prescription refill (Sherman, 2000).

Key Study: Carr, A. (1990) Compliance with medical advice. British Journal of General Practice, September 1990.

Applications: Improving adherence: Instructions for practitioners (Carr, 1990); Behavioural strategies (DiMatteo and DiNicola, 1982)

(b) Evaluate research into non-adherence to medical requests. [16]

Any appropriate evaluative point to receive credit.

Most likely:
Evaluation of theory:
Internal strengths and weaknesses.
Theoretical issues: reductionism, determinism, ethnocentrism.
Supporting/contradicting evidence.
Comparisons and contrasts with alternative theory.

Evaluation of research:
Strengths and weaknesses of methods, sample, controls, procedure.
Evaluation of and comparisons and/or contrasts with alternative approaches.

Evaluation of issues and debates:
Any relevant debate can be raised, such as objective versus subjective data; snapshot versus longitudinal studies; extent of ecological validity; nature versus nurture; freedom versus determinism; reductionism versus holism. Issues can be raised such as ethics, validity, ethnocentrism, effectiveness, application to real life.

19 (a) Describe the key study by Simons et al. on pain in newborn babies. [12]

There is increasing awareness of the issue of pain management in newborn babies and guidelines have been published for the treatment of procedural pain. However, the pain experienced by pre-term newborn babies can have short- and long-term detrimental effects.

The aim of the study therefore was to examine:
- how frequently analgesics were used in invasive procedures in newborn babies
- the associated 'pain burden' in this group.

The researchers studied a sample of 151 newborn babies during the first 14 days of treatment in a neonatal intensive care unit. Details of all painful procedures were recorded, including the number of attempts required and any analgesic therapy used. Experienced clinicians then provided estimates of how painful each procedure might be, which were then linked to the data.

Key findings:
- Each newborn baby underwent a mean ±SD of 14±4 procedures per day.
- Most procedures involved suctioning (63.6%).
- The highest exposure to painful procedures occurred during the first day of admission.
- Most of the procedures (26 out of 31) were estimated to be painful (pain scores >4 on a 10-point scale).
- On average, fewer than 35% of newborn babies per day received pre-emptive analgesic therapy.
- 39.7% of the newborn babies did not receive any analgesic therapy during the study period.

Simons et al. concluded that steps need to be taken to reduce the amount of pain experienced by newborn babies and also to improve the treatment of pain in newborn babies with analgesics.

(b) Evaluate the key study by Simons et al. on pain in newborn babies. [16]

Any appropriate evaluative point to receive credit.

Most likely:
Evaluation of theory:
Internal strengths and weaknesses.
Theoretical issues: reductionism, determinism, ethnocentrism.
Supporting/contradicting evidence.
Comparisons and contrasts with alternative theory.

Evaluation of research:
Strengths and weaknesses of methods, sample, controls, procedure.
Evaluation of and comparisons and/or contrasts with alternative approaches.

Evaluation of issues and debates:
Any relevant debate can be raised, such as objective versus subjective data; snapshot versus longitudinal studies; extent of ecological validity; nature versus nurture; freedom versus determinism; reductionism versus holism. Issues can be raised such as ethics, validity, ethnocentrism, effectiveness, application to real life.

Section C

20 Why do teenagers smoke cigarettes? You have studied the 'substances' section of the health option, and you know quite a lot about methodology in psychology, so you are in a perfect position to suggest a strategy to prevent people from starting to smoke.

(a) Using your knowledge of psychology, suggest a campaign to help prevent teenagers from starting to smoke. [8]

In this question part candidates are free to suggest any way in which the assessment request could be investigated. This may be in the form of a number of suggestions for research, application or development of a theoretical approach, or it may be that candidates design their own study to investigate the assessment request. Such an approach can include any appropriate method. Each answer should be considered individually as it applies to the mark scheme.

(b) Explain the evidence on which your campaign is based. [6]

Most likely:
In this question part candidates are expected to justify their decisions or evidence presented regarding the suggestion(s) made in answer to question part **(a)**.

Candidates have knowledge (from health promotion) of appeals to fear (Leventhal) and providing information (Lewin). Use of one of these methods is likely. They also have knowledge of the McVey key study for this area and they also know about reasons why people start to smoke.

Psychology and Sport

Section A

21 (a) Outline the instinct (Freudian) theory of aggression in sport. [3]

Freud stated that aggression has a biological basis. He believed that human behaviour is driven by two instincts: Eros, the life instinct, and Thanatos, the death instinct. As these two instincts are in conflict the energy produced is displaced to the 'real world' and aggression acts as a safety valve to dissipate the energy. This means that aggression need not be destructive, indeed for the individual releasing it, it is very constructive. Freud's approach is said to be hydraulic – the pressure builds up and unless it is allowed to be released it will produce some sort of damage. For Freud the aggressive energy built up between the two instincts must be released and any outlet will be sufficient. One *constructive* outlet is to channel the aggressive energy into sport; another outlet, which is *destructive* is any form of anti-social aggression. A further implication is that the build-up and release of aggression is inevitable and *must* happen in everyone without exception and it *must* happen throughout life.

1 mark: clear and accurate description with clear understanding.
1 mark: description with some understanding.
1 mark: basic description with little understanding.

(b) Give <u>three</u> differences between instinct theories and learning theories of aggression in sport. [3]

The instinct theory will be that of Freud (in the specification) and the learning theory will be that of Berkowitz: the frustration aggression hypothesis. Any three differences to receive credit.

Most likely:
Instinct: biological/genetic basis. Aggression is the result of an internal drive.
Learning: nothing is instinct; all behaviour is learned.
Instinct: biological/genetic basis. Every person is automatically aggressive and this aggression must be released.
Learning: all behaviour is learned, and so some people will learn aggression and some will not.
Instinct: sport is a constructive outlet for aggression. It is cathartic and will release the aggression.
Learning: sport is cathartic for aggression only if it has been taught to be.

3 marks: comparison and contrast with supporting examples.
2 marks: comparison and contrast with examples, or comparison or contrast but no examples.
1 mark: attempt at comparison and contrast with or without examples.

(c) Giving a reason for your answer, suggest which is the most effective way to reduce aggression in sport. [3]

Any answer appropriate answer to receive credit.

Most likely:

- engaging in vigorous activity does not act as a catharsis. Zillmann et al. (1972) compared the aggression levels of two groups: group one were provoked and then rode a bicycle and the other group were provoked but did no physical activity. If physical activity is cathartic then the first group should use the activity as an outlet and behave less aggressively than the group who had no outlet. Results showed exactly the opposite in that those exercising behaved more aggressively.
- What about watching sport? Berkowitz takes the extreme view when he writes 'a decade of laboratory research has virtually demolished the contention that people will lessen their aggressive tendencies by watching other persons beat each other up'. (1970, p.2) In fact not only has it been found that watching sport does not reduce aggression, it has been found that watching sport either has no effect on aggression or it actually increases it!
- Goldstein and Arms (1971) found spectators watching an American football match experienced increased feelings of hostility whereas gymnastics spectators did not. Arms et al. (1980) found that those watching contact sports (ice hockey and wrestling) reported more aggression than did those watching non-contact competitive sports (swimming). Studies suggest therefore that if anything, more rather than less aggression results from such activities.

3 marks: suggestion and reason clearly described with understanding.
2 marks: suggestion and reason described with some understanding.
1 mark: suggestion or reason outlined with little understanding.

22 From the study by McAuley et al. on measuring causal attributions:

(a) Describe the <u>three</u> causal dimensions. [3]

Weiner (1985) suggested the existence of three causal dimensions.

- Locus of causality: does the cause reside within the attributor or is it external?
- Stability: is the cause invariant or changeable over time?
- Control: is the cause controllable or uncontrollable?

1 mark: correct description of each dimension.

(b) Briefly outline how causal attributions were assessed in the first study. [3]

Most likely:
In the **first** study, 144 undergraduate students (74 males, 70 females) participated as partial fulfilment of an introductory psychology course requirement. After receiving the results of their midterm examination in psychology, subjects completed a questionnaire on which they indicated how well they thought they had performed in the examination and then made an open-ended causal attribution for their performance.

3 marks: correct and detailed description of one study with understanding.
2 marks: correct description of one study with some understanding.
1 mark: correct description of one study with limited or no understanding.

(c) Explain how correlations helped McAuley et al. to assess reliability. [3]

Two requirements here: knowledge of both correlations and reliability.

Reliability with questionnaires is test-retest and the two results can be correlated to see the level of consistency.

There is information provided in the study which provides the examples:

Coefficient alpha (Cronbach, 1951) was calculated to determine the internal consistency of the four scales. All values were within the acceptable range according to Nunnally (1978), ranging from 0.60 to 0.92 across the four studies. The average internal consistencies across studies were as follows: locus of causality, 0.67; stability, 0.67; personal control, 0.79; external control, 0.82. Clearly, treating personal and external control as separate dimensions and employing more homogeneous items have served to increase the reliability of the control subscale.

3 marks: appropriate comments with examples and clear understanding.
2 marks: comments with examples and some understanding.
1 mark: comments which are vague, with or without examples and with little understanding.

Section B

23 (a) Describe theory and research on anxiety and sport performance. [12]

Details of specification:

Theory:
- The catastrophe model (Fazey and Hardy, 1988)
- Zones of optimal functioning (Hanin, 1968)
- Reversal theory (Apter, 1982)

Research: Competition anxiety (Martens, 1977) Measures of competition anxiety: SCAT and CSAI–2 (Martens,1977, 1990)

Key Study: Davis, J. E. and Cox, R. H. (2002) Interpreting Direction of Anxiety Within Hanin's Individual Zone of Optimal Functioning. Journal of Applied Sport Psychology, 14, 43–52.

Applications: Anxiety management: Suinn's VMBR (Suinn, 1972).

(b) Evaluate theory and research on anxiety and sport performance. [16]

Any appropriate evaluative point to receive credit.

Most likely:
Evaluation of theory:
Internal strengths and weaknesses.
Theoretical issues: reductionism, determinism, ethnocentrism.
Supporting/contradicting evidence.
Comparisons and contrasts with alternative theory.

Evaluation of research:
Strengths and weaknesses of methods, sample, controls, procedure.
Evaluation of and comparisons and/or contrasts with alternative approaches.

Evaluation of issues and debates:
Any relevant debate can be raised, such as objective versus subjective data; snapshot versus longitudinal studies; extent of ecological validity; nature versus nurture; freedom versus determinism; reductionism versus holism. Issues can be raised such as ethics, validity, ethnocentrism, effectiveness, application to real life.

24 (a) Describe the key study by Widmeyer et al. on predicting cohesion in a coacting sport. [12]

Widmeyer et al.'s study was designed to identify variables that predict the cohesion of coacting teams, using Carron's model as a basis. Their hypothesis was that cohesion was related to the following:

- team size
- members' satisfaction with opportunities provided by team membership
- similarity of members
- coaches' efforts to foster cohesion
- prior team success, based on the ratings of the National Collegiate Athletic Association
- existence of team goals
- importance of team goals
- participation in establishing team goals
- intra-team task communication
- prior liking.

The subjects of the study were 85 female golfers from 18 Division 1 intercollegiate teams. Carron, Widmeyer and Brawley's Group Environment Questionnaire was used to gauge levels of cohesion.

They used step-wise multiple regression analyses and found that a significant amount of the variance in the four aspects of cohesion could be predicted from the nine independent variables (R2 = 56%–72%). Total satisfaction was the best single predictor of each aspect of cohesion (R2 = 32%–58%).

All the variables had a significant relationship to some aspect of cohesion, except the importance coaches placed on task cohesion and similarity of background. Some variables were more highly related to task cohesion, such as prior performance, while others were more closely related to social cohesion, for example prior liking.

(b) Evaluate the key study by Widmeyer et al. on predicting cohesion in a coacting sport. [16]

Any appropriate evaluative point to receive credit.

Most likely:
<u>Evaluation of theory</u>:
Internal strengths and weaknesses.
theoretical issues: reductionism, determinism, ethnocentrism.
Supporting/contradicting evidence.
Comparisons and contrasts with alternative theory.

<u>Evaluation of research</u>:
Strengths and weaknesses of methods, sample, controls, procedure.
Evaluation of and comparisons and/or contrasts with alternative approaches.

<u>Evaluation of issues and debates</u>:
Any relevant debate can be raised, such as objective versus subjective data; snapshot versus longitudinal studies; extent of ecological validity; nature versus nurture; freedom versus determinism; reductionism versus holism. Issues can be raised such as ethics, validity, ethnocentrism, effectiveness, application to real life.

Section C

25 In 1913 Ringelmann found that when he asked groups of men to pull on a rope, they did not pull as hard, or put in as much effort, as they did when they were pulling alone. Ringelmann called this behaviour social loafing.

(a) Using your knowledge of psychology, design a study to investigate social loafing in sports team players. [8]

In this question part, candidates are free to suggest any way in which the assessment request could be investigated. This may be in the form of a number of suggestions for research, application or development of a theoretical approach, or it may be that candidates design their own study to investigate the assessment request. Such an approach can include any appropriate method. Each answer should be considered individually as it applies to the mark scheme.

(b) Explain the evidence on which your suggestion is based. [6]

In this question part, candidates are expected to justify their decisions or evidence presented regarding the suggestion(s) made in answer to question part **(a)**.

The Ringlemann study is the most obvious because it is used in the question.

Candidates may also refer to research by Kerr and Brunn (1981) which examines: (1) Latane's (1979) explanation that social loafing only occurs in different-sized groups; (2) Ingham et al.'s (1974) 'hide-in-the-crowd' explanation suggesting the larger the group the less effort, as an individual can become more anonymous.