CAMBRIDGE INTERNATIONAL EXAMINATIONS

Pre-U Certificate

MARK SCHEME for the May/June 2013 series

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.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

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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** questions **(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 appear after the mark schemes.

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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

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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** which are **competently organised** into issues/debates, methods or approaches. **Effective use** of appropriate supporting **examples** which are **explicitly related** to the question. **Analysis** (valid conclusion that effectively summarises 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** which are **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

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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

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SECTION C question part (a)	
This mark scheme applies to questions 5, 10, 15, 20, 25	AO2 = 8
In this question part candidates are either directed to design a study based on a named method or are free to suggest any way in which the assessment request could be investigated. 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

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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 his or her decisions or evidence presented regarding the design made in answer to question part (a). Two (or more) components may be presented here (full marks can be gained for just one): • Knowledge of methodology. • Knowledge of appropriate topic area and/or key study.	
Quality of explanation and **depth of argument** is **impressive.** **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

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Abnormality

Section A

1 (a) Outline <u>three</u> characteristics of schizophrenia according to DSM. [3]

According to *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-TR), to be diagnosed with schizophrenia, three diagnostic criteria must be met:

1 Two or more of the following symptoms:
- Delusions
- Hallucinations
- Disorganised speech, which is a manifestation of formal thought disorder
- Grossly disorganised behaviour (e.g. dressing inappropriately, crying frequently) or catatonic behaviour
- Negative symptoms: Blunted affect (lack or decline in emotional response), alogia (lack or decline in speech), or avolition (lack or decline in motivation)

2 Social or occupational dysfunction: For a significant portion of the time since the onset of the disturbance, one or more major areas of functioning such as work, interpersonal relations, or self-care, are markedly below the level achieved prior to the onset.

3 Significant duration: Continuous signs of the disturbance persist for at least six months. This six-month period must include at least one month of symptoms (or less, if symptoms remitted with treatment).

1 mark for identification of all three.
2 marks for basic outline of three.
3 marks for competent outline of three with some elaboration.

(b) Describe <u>one</u> type of schizophrenia. [3]

Most likely: (from DSM itself)

1 **Paranoid**: A. Preoccupation with one or more delusions or frequent auditory hallucinations. B. None of the following is prominent: disorganised speech, disorganised or catatonic behaviour, or flat or inappropriate affect.

2 **Disorganised**: A. All of the following are prominent: (1) disorganised speech (2) disorganised behaviour (3) flat or inappropriate affect B. The criteria are not met for Catatonic Type.

3 **Catatonic**: A type of Schizophrenia in which the clinical picture is dominated by at least two of the following: (1) motoric immobility as evidenced by catalepsy (including waxy flexibility) or stupor (2) excessive motor activity (that is apparently purposeless and not influenced by external stimuli) (3) extreme negativism (an apparently motiveless resistance to all instructions or maintenance of a rigid posture against attempts to be moved) or mutism (4) peculiarities of voluntary movement as evidenced by posturing (voluntary assumption of inappropriate or bizarre postures) (5) stereotyped movements, prominent mannerisms, or prominent grimacing (6) echolalia (word repetition) or echopraxia (repetitive imitation)

4 **Undifferentiated**: A type of Schizophrenia in which symptoms that meet Criterion A are present, but the criteria are not met for the Paranoid, Disorganised, or Catatonic Type.

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5 **Residual**: A type of Schizophrenia in which the following criteria are met: A. Absence of prominent delusions, hallucinations, disorganised speech, and grossly disorganised or catatonic behaviour. B. There is continuing evidence of the disturbance, as indicated by the presence of negative symptoms or two or more symptoms listed in Criterion A for Schizophrenia, present in an attenuated form (e.g., odd beliefs, unusual perceptual experiences).

The ICD-10 defines two additional subtypes:
- Post-schizophrenic depression: A depressive episode arising in the aftermath of a schizophrenic illness where some low-level schizophrenic symptoms may still be present. (ICD code F20.4)
- Simple schizophrenia: Insidious and progressive development of prominent negative symptoms with no history of psychotic episodes. (ICD code F20.6)

3 marks for accurate and detailed description of one type with understanding and clear psychological knowledge.
2 marks for accurate description of one type with some understanding.
1 mark for vague description of one type with little or no understanding.

(c) Give <u>one</u> difference between the biochemical explanation of schizophrenia and a psychological (e.g. the role of the family) explanation of schizophrenia. [3]

Most likely:
Biochemical: The dopamine hypothesis suggests that as hallucinogenic drugs are chemically similar to dopamine it is believed that dopamine could cause schizophrenia.
Psychological:
- **Double bind hypothesis** Bateson (1956) described the situation were families send out contradictory information to their children. For example parents who say they care whilst appearing critical or who express love whilst appearing angry.
- **Pseudo-mutuality** Wynne & Singer (1963) suggest communication in some families is 'fragmented and disjointed.' Sentences show little continuity and conversations switch focus from one topic to another.
- **Schizophrenogenic mother** Fromm-Reichman (1948) described a mother who is cold, domineering, conflict inducing, rejecting and very moralistic, particularly about sex. Her behaviour is contradictory saying 'yes' when body language suggests 'no.'

Possible difference:
- biochemical explanation versus non-chemical;
- biochemical can be measured versus psychological which cannot be measured scientifically;
- biochemical not externally influenced versus psychological influenced by upbringing/ environment.

3 marks for explicit **difference** with supporting example(s) and good understanding of biochemical and psychological explanations.
2 marks for explicit **difference** possibly with supporting example(s) with limited understanding of biochemical and psychological explanations.
1 mark for description of biochemical and description of psychological explanation with no explicit difference.

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2 From the study by Silberg et al on depression amongst adolescent girls:

(a) Describe how data on life events were gathered. [3]

Quoting directly from the article:
The occurrence of each of 39 past-year life events was included as part of a series of questionnaires that the parents and the twins were asked to complete during the home interview. To help circumvent confounding the report of life stress with the rating of depression, maternal reports of the twins' past-year life events were analysed. Life events were categorised a priori as potentially within (e.g., breaking up with someone) or beyond (e.g., death of a close friend) the individual's control. Since we were interested in understanding the extent to which the genes for depression also increased the risk of experiencing negative life events, we analysed only those events that could arise as much from the child's genotype as from his or her environment, such as failing a grade or losing a close friend through arguments. A life-events subscale was obtained by comparing those "behaviour-dependent" events that were significantly associated with the ratings of depression, using a separate regression model for boys and girls.

3 marks for appropriate and detailed description with understanding.
2 marks for accurate description with some understanding.
1 mark for vague description with little understanding.
NB: direct quoting of detail from abstract not needed and neither do answers need every detail for full marks to be awarded.

(b) Outline <u>one</u> advantage of this method of data collection in this study. [3]

Most likely:
Method of data collection is a questionnaire so all usual advantages apply.

- Participants given opportunity to express a range of feelings and explain their behaviour.
- May be only way to access attitudes and emotions i.e. non-observable phenomena.
- The data obtained may be 'rich' and detailed especially with open questions.
- Data is often qualitative, but may also be quantitative depending on type of question.
- Relatively large numbers of participants can be done relatively quickly: can increase representativeness and generalisability of the results.
- Easy to replicate, especially a questionnaire.
- Closed/forced choice questions easier to score/analyse.

3 marks for appropriate advantage, detailed description with understanding.
2 marks for appropriate advantage, description with some understanding.
1 mark for appropriate advantage, vague description with little understanding.

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(c) Outline <u>one</u> weakness of this method of data collection in this study. [3]

Most likely:
Method of data collection is a questionnaire so all usual disadvantages apply.

- Data may be unique and not comparable to that of others.
- Participants may provide socially desirable responses; not give truthful answers; demand characteristics.
- Researchers have to be careful about use of leading questions; it could affect the validity of the data collected.
- Questions/scales may be interpreted differently by different participants.

3 marks for appropriate weakness, detailed description with understanding.
2 marks for appropriate weakness, description with some understanding.
1 mark for appropriate weakness, vague description with little understanding.

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Section B

3 (a) Describe the key study by Shapira et al on brain activation in disgust-inducing pictures in obsessive compulsive disorder. [12]

Abstract from study:
Background: There is growing interest in the role of disgust in the pathogenesis of obsessive-compulsive disorder (OCD).
Methods: Eight OCD subjects with contamination preoccupations and eight gender- and age-matched healthy volunteers viewed pictures from the International Affective Picture System during functional magnetic resonance imaging scans.
Results: A different distribution of brain activations was found during disgust-inducing visual stimulation in several areas, most notably the insula, compared with neutral stimulation in both OCD subjects and healthy volunteers.
Furthermore, whereas activation during the threat-inducing task in OCD subjects showed a pattern similar to that in healthy volunteers, the pattern of activation during the disgust-inducing task was significantly different, including greater increases in the right insula, para-hippocampal region, and inferior frontal sites.
Conclusions: This pilot study supports the relevance of disgust in the neurocircuitry of OCD with contamination preoccupation symptoms; future studies looking at non-OCD individuals with high disgust ratings, non-contamination-preoccupied OCD individuals, and individuals with other anxiety disorders are needed.

(b) Evaluate the key study by Shapira et al on brain activation in disgust-inducing pictures in obsessive compulsive disorder. [16]

Any appropriate evaluative point to receive credit.
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.

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4 (a) Describe the key study by Simeon et al on depersonalisation disorder. [12]

Abstract from study:
Objective: In contrast to the recent surge of interest in other dissociative disorders, DSMIII-R depersonalisation disorder has not been thoroughly investigated and characterised. The authors systematically elucidated its phenomenology, comorbidity, traumatic antecedents, and treatment history.
Method: Thirty adult subjects (19 women and 11 men) were consecutively recruited and administered various structured and semi-structured interviews as well as the self-rated Dissociative Experiences Scale. An age- and sex-matched normal comparison group was also recruited.
Results: The mean age at onset of depersonalisation disorder was 16.1 years (SD = 5.2). The illness had a chronic course that was usually continuous but sometimes episodic. Severe distress and high levels of interpersonal impairment were characteristic. Unipolar mood and anxiety disorders were common, but none emerged as specifically related to the depersonalization. A wide variety of personality disorders was manifested; avoidant, borderline, and obsessive-compulsive were most common. Although not highly traumatised, the subjects with depersonalisation disorder reported significantly more childhood trauma than the normal comparison subjects. Depersonalisation had been typically treatment refractory; only serotonin reuptake inhibitors and, to a lesser extent, benzodiazepines had been of any therapeutic benefit.
Conclusions: This study supports the conceptualisation of depersonalisation disorder as a distinct disorder with a characteristic course that is independent of mood, anxiety, and personality symptoms. A subtle relationship may exist between childhood trauma and depersonalisation disorder that merits further investigation. The disorder appears to be highly treatment refractory, and prospective treatment trials are warranted.

(b) Evaluate the key study by Simeon et al on depersonalisation disorder. [16]

Any appropriate evaluative point to receive credit.
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.

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Section C

5 In the discussion of the study by Tice et al on affect regulation over impulse control there is the comment that "eating does not actually accomplish lasting mood change, even though people may believe that it does". The reasons why people have this belief need to be investigated.

(a) Using your knowledge of psychology, design a study using a questionnaire to investigate the reasons why people believe eating leads to lasting mood change. [8]

In this question part candidates are either directed to design a study based on a named method or are free to suggest any way in which the assessment request could be investigated. Each answer should be considered individually as it applies to the mark scheme. As the question specifies 'questionnaire' then a candidate is expected to show appropriate methodological knowledge about questionnaires. The questionnaire may be open or closed and if closed show use of a rating or Likert type scale. There should also be some evidence of how the questions will be analysed or scored.

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

In this question part candidates are expected to justify his or her decisions or evidence presented regarding the design made in answer to question part (a).
Two components may be presented here (full marks can be gained for just one):

- Knowledge of methodology, specifically that of questionnaire design, implementation and scoring.
- Knowledge of the Tice et al study mentioning eating behaviour and/or mood change.

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Crime

Section A

6 From the study by Pinizzotto and Finkel on criminal personality profiling:

(a) Describe the WHAT-to-WHY-to-WHO model. [3]

Quoting directly from the article:
Once the material has been collected, the WHAT, the profiler attempts to determine the WHY of the crime i.e. the motivation for it. A basic premise of profiling is if the WHAT and WHY can be determined, the WHO will follow. The profiler proceeds from the WHAT to the WHY to the WHO.

3 marks for clear and concise description of the model with full understanding.
2 marks for description of the model with some understanding.
1 mark for vague description of the model.

(b) Give <u>one</u> weakness of the WHAT-to-WHY-to-WHO model. [3]

Most likely:
- The WHAT-WHY-WHO model does not describe the HOW i.e. how to get from WHAT to WHY or from WHY to WHO.
- The model does not specify which behavioural, correlational, or psychodynamic principles are being invoked for making predictions.
- There are more processes going on than the single motivational process this model suggests. Pinizzotto argues that there is also a correlational process going on (WHAT to WHO) and then another second-order correlation, a WHAT to WHO attributional loop.
- The process is based on correlations from which one cannot assume cause and effect.

3 marks for clear and concise weakness stated that shows understanding and psychological knowledge.
2 marks for weakness stated showing some understanding but with little or no elaboration.
1 mark for weakness stated that is basic with little or no understanding.

(c) Outline <u>one</u> reason why the WHAT-to-WHY-to-WHO model should be more holistic. [3]

Most likely:
Pinizzotto suggests that profiling is a complex process and is much, much more than a simple one level analysis of crime scene details. He states “a criminal personality profile appears to be the result of a complex, multilevel series of attributions, correlations and predictions. The theory of profiling ought to reflect these complexities.”
Will candidates pick up on this conclusion?

3 marks the candidate clearly understands what holism is and makes a good argument for profiling being more holist.
2 marks the candidate understands what holism is and provides a reasonable answer.
1 mark the candidate lacks understanding of what holism is and provides nothing more than a basic statement.

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7 From the study by Cann on cognitive skills programmes:

(a) Describe the Enhanced Thinking Skills offender programme. [3]

Enhanced Thinking Skills (ETS) is a short group-based general offending behaviour programme delivered by HM Prison Service that addresses thinking and behaviour associated with offending with the objective of reducing general reconviction rates. Through a sequenced series of structured exercises, ETS aims to boost prisoners' cognitive skills to enhance offenders' ability to achieve worthwhile goals and reduce recidivism. The exercises target six key aspects of thinking skills linked with offending: impulse control, cognitive style (flexible thinking), social perspective taking, values/moral reasoning, critical reasoning and interpersonal problem solving.
ETS was developed by the Prison Service in the early 1990s and was first accredited for use in custody in 1996. The programme consists of 20 two-hour sessions, run between three and five times per week for a period of four to six weeks. Sessions involve interactive exercises, assignments, role playing and discussions, and are run by two facilitators with no more than ten participants per group. In 2009, ETS was replaced by the Thinking Skills Programme (TSP), representing a refresh and update of the cognitive skills programme in line with advances in theory and practice.

3 marks for clear and concise description of ETS with full understanding.
2 marks for description of ETS with some understanding.
1 marks for vague description of ETS.

(b) Describe the psychological approach on which this offender programme is based. [3]

Following the cognitive-behavioural approach, ETS is based on the premise that cognitive skills deficits (poor problem solving and critical reasoning etc.) are important factors in explaining offending behaviour, and that such skills can be taught. Details of the cognitive behaviour approach are therefore needed.

3 marks the candidate clearly understands the cognitive-behavioural approach and understands how ETS applies to it. Good psychological knowledge is evident.
2 marks the candidate understands the cognitive-behavioural approach and has some understanding how ETS applies to it. Psychological knowledge is lacking.
1 mark the candidate struggles to identify the approach and can only make a few bland statements.

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(c) Suggest <u>two</u> reasons why the programme was not effective. [3]

- Most likely (according to Cann):
- Although well matched on static risk factors, participants and matched comparisons may have differed in regard to prevalence and strength of unmeasured dynamic factors, such as motivation to change. Thus participants may have been at higher risk of reconviction in relation to dynamic factors.
- The extent to which offenders participated in interventions other than cognitive skills programmes, both in custody and the community, was unknown. This may have affected results, e.g. reconviction rates of the comparison group may have been lower due to impact of other interventions.
- The study measured reconviction which is a proxy measure for reoffending. It is also a yes/no outcome which does not allow for assessment of change in severity and frequency of offending.
- The Offenders Index, used to assess reconviction, may not be the most complete source of such information
- The sample size, while reasonable for research using female offenders, is small for an outcome study (although in meta-analysis, Andrews and Dowden (2005) considered 'small' sample sizes as fewer than 100).

Any other appropriate suggestion to receive credit (but must show psychological knowledge for 3 marks).

3 marks for appropriate psychological suggestions with elaboration showing good understanding.
2 marks for appropriate psychological suggestions with some elaboration and understanding (or one very good and one basic).
1 mark for one good or two suggestions that are basic with poor or no elaboration and limited understanding.

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Section B

8 (a) Describe theories and research proposed to explain criminal behaviour. [12]

Specification:
Theory:
- Cognitive Theories: Rational choice theory (Cornish and Clarke, 1986) and Criminal Thinking Patterns (Yochelson and Samenow, 1976).
- Learning Theory: Differential Association Theory (Sutherland, 1939).
- Personality Theory: Personality theory and crime (Eysenck, 1977).

Research: Genetic explanations in the etiology of criminal behaviour (Mednick, 1987). Brain abnormalities in murderers (Raine et al, 1997).
Key study: Farrington, D. P., Coid, J. W., Harnett, L., Jolliffe, D., Soteriou, N., Turner, R. and West, D. J. (2006) Criminal careers and life success: new findings from the Cambridge Study in Delinquent Development.
Applications: Situational Crime Prevention (Cornish and Clarke, 1986). The Psychological Inventory of Criminal Thinking Styles (Palmer and Hollin, 2003).

(b) Evaluate theories and research proposed to explain criminal behaviour. [16]

Any appropriate evaluative point to receive credit.
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.

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9 (a) Describe the key study by Kassin and Sommers on inadmissible testimony, instructions to disregard, and the jury. [12]

Abstract from study:
The present study tested the hypothesis that jurors comply selectively with instructions to disregard inadmissible evidence. A total of 81 mock jurors read a murder trial summary in which a wiretap was ruled admissible, inadmissible because it was not reliable, or inadmissible because it was illegally obtained (there was also a no-wiretap control group). As predicted, participants were more likely to vote guilty and interpret subsequent evidence as more incriminating in the admissible and inadmissible/due process conditions than in the admissible/unreliable and control groups. These results suggest that jurors are influenced not by the judge's ruling per se but by the causal basis for that ruling. Conceptual and practical implications are discussed.

(b) Evaluate the key study by Kassin and Sommers on inadmissible testimony, instructions to disregard, and the jury. [16]

Any appropriate evaluative point to receive credit.
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.

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Section C

10 The cognitive interview technique outlined by Geiselman is based on four memory retrieval rules. One problem Geiselman found when testing the technique was that even though the interviewers were told about the retrieval rules, many could not remember them when testing participants. Maybe the use of mnemonics (memory aids) would help interviewers to remember the rules.

(a) Using your knowledge of psychology, design a laboratory experiment to test the effectiveness of mnemonics for a cognitive interviewer. [8]

In this question part candidates are either directed to design a study based on a named method or are free to suggest any way in which the assessment request could be investigated. Each answer should be considered individually as it applies to the mark scheme. As the question is 'laboratory experiment' then a knowledge of IVs, DVs, controls and any other appropriate methodology should be evident in the answer.

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

In this question part candidates are expected to justify his or her decisions or evidence presented regarding the design made in answer to question part (a).
Two components may be presented here (full marks can be gained for just one):

- Knowledge of methodology, specifically that of a laboratory experiment.
- Knowledge of the cognitive interview technique and mnemonics.

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Environment

Section A

11 Smith and Knowles studied the attributional consequences of personal space invasion.

(a) Give <u>three</u> differences between study 1 and study 2. [3]

Most likely:
- Study 1 used only a male invader, and thus does not allow for tests of sex of invader or sex of invader × sex of subject effects.
- The first study indicated that invasion produced negative impressions, it did not assess the further question of whether the subject was attributing different motives to the invader. Thus, a second study was conducted to investigate the attributions of intent to male and female invaders.
- The crossing speed was not measured in this second study since the comparability of these invasions to those studied by Konecni et al, had already been established by the first study.
- 33 pedestrians in study 1; 24 in study 2.
- Study 2 conducted on a different crosswalk on the same street.
- Study 1 invaded at either 30.5 cms and 150 cms; study 2 at 4 cms and 150 cms. Study 1 questionnaires were rating scales only; study 2 questionnaires were rating scales and an open-ended question.

Any appropriate difference to receive credit.
1 mark for each appropriate difference.

(b) What was the open-ended question asked in study 2 and why was this question asked? [3]

The question was "why do you think that this person was standing at that distance from you?" This is fundamental to the whole study because it was the only way in which attributional consequences could be assessed.

3 marks candidate shows clear understanding of *why* this question was asked.
2 marks candidate shows some understanding of *why* this question was asked.
1 mark if question itself largely correct.

(c) Suggest why open-ended questions tend to be used less often than closed questions in research. [3]

Most likely (other appropriate answers to receive credit):
- Open-ended questions give qualitative data which is not directly applicable to statistical analysis.
- If a researcher codes qualitative data there could be researcher bias making answers fit into categories.
- Participants can give socially desirable answers; respond to demand characteristics or just give a brief answer because they can't be bothered spending time.

3 marks Suggestion is appropriate, shows good understanding and relevant psychological knowledge.
2 marks Suggestion is appropriate but basic and lacking detail. Some understanding.
1 mark Suggestion is basic with little elaboration or understanding.

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12 From the study of human navigation by Aginsky et al:

(a) Describe the stage theory of human navigation. [3]

From the study:
Stage theory: The study of human navigation has long been dominated by the so-called stage theory, i.e. the notion that there are three distinct types of spatial knowledge (landmark, route, and survey knowledge), that are acquired sequentially during spatial learning and development. Further, the stages of adult spatial learning mirror the developmental stages in spatial understanding identified in children. Siegel and White (1975) summarised adult spatial learning as follows: first, landmarks are noticed and remembered second, route knowledge immediacy is acquired through paired associations of actions with landmarks; third, survey knowledge is obtained as routes were correlated equally with recall frequency and become metricised as more routes are learned.

3 marks for clear and concise description of the stage theory with full understanding.
2 marks for description of the stage theory with some understanding.
1 mark for vague description of the stage theory.

(b) Describe the 'alternative' to the stage theory that Aginsky et al proposed. [3]

From the study:
Based on the results of our route learning experiment in a driving simulator, an **alternative** to the stage theory is proposed. Subjects follow either a visually dominated or a spatially dominated strategy to solve a route-learning problem. In the visually dominated strategy, subjects base their way finding decisions on visually recognising decision points along a route; the decision points are not integrated into any kind of survey representation. In the spatially dominated strategy, on the other hand, subjects represent the environment as a survey map right from the start; that is, they do not pass through a landmark or route stage.
This means that rather than a sequence of stages, the alternative is that there are no stages!

3 marks for clear and concise description of the alternative theory with full understanding.
2 marks for description of the alternative theory with some understanding.
1 mark for vague description of the alternative theory.

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(c) Aginsky et al suggested "these strategies may be subserved by different cortical areas recently characterised in neurophysiological studies of animals solving maze problems". Briefly discuss one issue raised by this statement. [3]

Most likely:

- generalising from animals to humans
- human studies using scanners (MRI, fMRI etc.) can only be done in a laboratory
- animal studies using scanners (MRI, fMRI etc.) can only be done in a laboratory
- studies using scanners (MRI, fMRI etc.) are scientific
- studies such as there are based on a physiological approach
- can't assume cause and effect in such studies.

Candidates are free to introduce any appropriate debate here.

3 marks Discussion is appropriate, shows good understanding and relevant psychological knowledge.
2 marks Discussion is appropriate but basic and lacking detail. Some understanding.
1 mark Discussion is basic with little elaboration or understanding.

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Section B

13 (a) Describe what psychologists have found out about behaviour in emergency situations. [12]

Specification:

Theory:

- Definitions of catastrophe, explanations of behaviour in emergencies:
- Contagion (Le Bon, 1895)
- Script schemata (Schank and Abelson; Donald and Canter, 1992)
- Self categorisation theory (e.g. Drury, Cocking, Reicher).

Research: Laboratory simulations and real life events (Mintz, 1951; Kugihara, 2001), Air: Manchester (1985).

Shipping: Herald of Free Enterprise (1997). Fires: Chicago (1903), King's Cross (1987).

Key Study: Drury, J., Cocking, C. and Reicher, S. Everyone for themselves? A comparative study of crowd solidarity among emergency survivors. British Journal of Social Psychology (2008), 00, 1–21

Applications:

- Preventing catastrophe: evacuation from fires (Proulx, 2001) and devising evacuation messages (Loftus, 1979)
- Supporting victims of catastrophe: treating PTSD (Hodgkinson and Stewart, 1991)

(b) Evaluate what psychologists have found out about behaviour in emergency situations. [16]

Any appropriate evaluative point to receive credit.

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.

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14 (a) Describe theory and research on crowding and density. [12]

Specification:

Theory:

- Definitions of density and crowding
- Explanations: social overload, privacy regulation, the control perspective
- Animal studies: Dubos (1965), Christian (1960), Calhoun (1962).

Research:

- Crowding and social behaviour: Dukes and Jorgenson (1976)
- Crowding and performance: Mackintosh et al (1975)
- Crowding and health: Lundberg (1976).

Key Study: Evans, G. W. and Wener, R. E. (2007) Crowding and personal space invasion on the train: Please don't make me sit in the middle. Journal of Environmental Psychology. 27, 1, March 2007

Applications:

- Crowding in public places (e.g. Evans and Wener, 2007)
- Preventing crowding from occurring (Langer and Saegert, 1977)
- Treating crowding (Karlin et al, 1979).

(b) Evaluate theory and research on crowding and density. [16]

Any appropriate evaluative point to receive credit.

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.

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Section C

15 The study by Chafin et al found that participants who listened to classical music for ten minutes after a stressful task had lower blood pressure than those who heard jazz or pop music. What is needed is a study to investigate the wider benefits of music and recovery from major illness.

(a) Using your knowledge of psychology, design a study to investigate the positive benefits of music on health. [8]

In this question part candidates are either directed to design a study based on a named method or are free to suggest any way in which the assessment request could be investigated. Each answer should be considered individually as it applies to the mark scheme. As the question is 'design a study' then this could be a laboratory or field experiment, self-report (questionnaire or interview) or an observation. Methodology specific to each method should be explicit.

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

In this question part candidates are expected to justify his or her decisions or evidence presented regarding the design made in answer to question part (a).
Two components may be presented here (full marks can be gained for just one):

- Knowledge of methodology, specifically that of a method appropriate to the topic being investigated.
- Knowledge of the positive benefits of music in relation to health.

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Health

Section A

16 The study by Carr on compliance with medical advice outlines a series of guidelines for improving patient compliance.

(a) Explain <u>one</u> of the guidelines outlined by Carr. [3]

Most likely answers:
- Develop an appointment system which ensures minimum patient waiting time.
- Adopt a friendly and informal conversational style which encourages patients to provide information.
- Assess patients' beliefs about the aetiology of their complaints and their expectations concerning treatment.
- Clarify how much information patients would like about their condition.
- Offer an explanation of the patient's condition and the rationale for treatment.
- Help the patient appreciate the costs and benefits of compliance and non-compliance.
- Enlist the aid of the patient's family or friends in helping the patient comply with medical advice.
- Review compliance at each follow-up consultation.

3 marks Description of guideline clear and accurate. Description of rationale is clear and accurate.
2 marks Guideline or rationale identified but description lacking detail.
1 mark Description or rationale only or both present but vague and inaccurate.

(b) Explain a different guideline from the one you have given in part (a). [3]

Most likely answers:
- Develop an appointment system which ensures minimum patient waiting time.
- Adopt a friendly and informal conversational style which encourages patients to provide information.
- Assess patients' beliefs about the aetiology of their complaints and their expectations concerning treatment.
- Clarify how much information patients would like about their condition.
- Offer an explanation of the patient's condition and the rationale for treatment.
- Help the patient appreciate the costs and benefits of compliance and non-compliance.
- Enlist the aid of the patient's family or friends in helping the patient comply with medical advice.
- Review compliance at each follow-up consultation.

NB no marks if the guideline is the same as (a) or is ‘in other words’ type of answer. It must be totally different.
3 marks Description of guideline clear and accurate. Description of rationale is clear and accurate.
2 marks Guideline or rationale identified but description lacking detail.
1 mark Description or rationale only or both present but vague and inaccurate.

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(c) Suggest <u>one</u> reason why people may not adhere to medical requests. [3]

Most likely:

- Rational non-adherence (Bulpitt, 1988); some aspect of health belief model or any other appropriate theory of non-adherence.
- **Disease/Medical treatment programmes** Side effects of treatment; Duration of treatment; Complexity of treatment; People are less likely to adhere if the treatment requires a change in long standing habits and behaviours; Expense or cost.
- **Personal:** Fear of treatments: Leventhal's (1970) parallel response model. People have two beliefs 'danger control' (seek help because their health is in danger) or 'fear control' (seek ways to reduce fear = avoid treatment, get drunk, etc.). Common sense: Leventhal (1982) model where patient's own views about their illness can contradict doctor instructions and treatment.
- Becker & Rosenstock's (1984) health belief model is relevant. Patients weigh up the pros or benefits of taking action against the cons or barriers of taking action and make a decision based on their assessment of these factors.
- Fishbein & Ajzen's theory of reasoned action is appropriate.
- Relationship between person and medical service. Speed of service; Practitioners' personality: e.g. doctor-centred and patient-centred personality.

3 marks Suggestion competent based on appropriate psychological explanation. Description is clear, accurate and detailed.
2 marks Suggestion competent based on appropriate psychological explanation. Description may be lacking, inaccurate or not detailed.
1 mark Suggestion is anecdotal and shows little awareness of psychological knowledge.

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17 (a) Describe <u>one</u> way in which pain can be measured using observation. [3]

Most likely:
On a basic level, Turk et al (1985) have identified four pain behaviours:

- Facial/audible expression of distress: grimace, clench teeth, groan, etc.
- Distorted ambulation or posture: stooping, limping, rubbing, holding area
- Negative affect: being irritable, etc.
- Avoidance of activity: stay at home, rest, opt-out, etc.

Assessment of pain behaviour in a clinical setting uses the **UAB Pain Behaviour Scale** Richards et al (1982). Nurses observe patients daily and rate each of 10 behaviours such as mobility, down-time, and others on a 3 point scale scoring 0/.5/1 for each. Ratings are totalled daily so pain behaviour over a period can be recorded.
The Abbey Pain Scale is also appropriate and is designed for people who cannot speak.

3 marks for clear and full description of measure with understanding.
2 marks for reasonable description of measure with some understanding.
1 mark for vague description of measure which has limited or no understanding.

(b) Suggest <u>one</u> advantage of using observation to measure pain. [3]

Most likely:

- Observation is an objective measure; it is a measure of behaviour rather than of what people say or think. A self-report of pain is too vague.
- Observers are health professionals who know what to look for; reliability could be checked.
- Observations can be taken over a period of time to give an accurate record of decrease in pain behaviour.

3 marks for clear and full description of advantage with understanding.
2 marks for reasonable description of advantage with some understanding.
1 mark for vague description of advantage which has limited or no understanding.

(c) Suggest <u>one</u> disadvantage of using observation to measure pain. [3]

Most likely:

- Observers may misinterpret pain behaviour
- There can be individual, gender and cultural differences in the way people behave when in pain
- Observation doesn't give a person an opportunity to describe their pain; to report on increase or decrease in intensity. It might make them feel better to tell someone about it. Observation is impersonal.

3 marks for clear and full description of disadvantage with understanding.
2 marks for reasonable description of disadvantage with some understanding.
1 mark for vague description of disadvantage which has limited or no understanding.

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Section B

18 (a) Describe the key study by Tapper et al on The Food Dudes. [12]

Objective: To evaluate a peer-modelling and rewards-based intervention designed to increase children's fruit and vegetable consumption.
Design: Over a 5-month period, children in an experimental and a control school were presented with fruit and vegetables at lunchtime. Children aged 5–7 years also received fruit at snack time (mid-morning). The intervention was implemented in the experimental school and levels of fruit and vegetable consumption were measured at baseline, intervention and at 4-month follow-up.
Subjects: In total, 749 children aged 5–11 years.
Intervention: Over 16 days children watched video adventures featuring heroic peers (the Food Dudes) who enjoy eating fruit and vegetables, and received small rewards for eating these foods themselves. After 16 days there were no videos and the rewards became more intermittent.
Main outcome measures: Consumption was measured (i) at lunchtime using a five-point observation scale; (ii) at snack time using a weighed measure; (iii) at home using parental recall.
Results: Compared to the control school, lunchtime consumption in the experimental school was substantially higher at intervention and follow-up than baseline ($P<0.001$), while snack time consumption was higher at intervention than baseline ($P<0.001$). The lunchtime data showed particularly large increases among those who initially ate very little. There were also significant increases in fruit and vegetable consumption at home ($P<0.05$).
Conclusions: The intervention was effective in bringing about substantial increases in children's consumption of fruit and vegetables.

(b) Evaluate the key study by Tapper et al on The Food Dudes. [16]

Any appropriate evaluative point to receive credit.
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.

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19 (a) Describe theory and research on stress. **[12]**

Specification:
Theory: Definitions of stress. Physiology of stress. The GAS (Selye, 1956). The effect of stress on health.
Research: Stress measurement techniques:

- Physiological by blood pressure (Jamner, 1991).
- Psychological by questionnaire: (Holmes and Rahe, 1967; Friedman and Rosenman, 1974).

Key study: Bridge, L. R., Benson, P., Pietroni, P. C. and Priest, R. G. (1988) Relaxation and imagery in the treatment of breast cancer. British Medical Journal, 1988 November 5, 297(6657), 1169–1172.
Applications:

- Managing stress: relaxation and imagery (Bridge et al, 1987).
- Preventing stress: stress inoculation training (Meichenbaum, 1985).

(b) Evaluate theory and research on stress. **[16]**

Any appropriate evaluative point to receive credit.
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.

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Section C

20 The study by McKinstry and Wang looked at what patients thought of the way their doctor dressed. In a medical consultation the patient-practitioner interaction is important, so perhaps the way a *patient* dresses when consulting a doctor has an effect on the consulting style of the doctor.

(a) Using your knowledge of psychology, design an observational study to determine the effect of the style of clothing worn by patients when seeing their doctor. [8]

In this question part candidates are either directed to design a study based on a named method or are free to suggest any way in which the assessment request could be investigated. Each answer should be considered individually as it applies to the mark scheme. As the question requires an observation, then the type of observation (controlled, naturalistic, participant, non-participant) should be explicit along with details of how data will be recorded and what response categories will be used. Use of inter-rater reliability may also be mentioned.

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

In this question part candidates are expected to justify his or her decisions or evidence presented regarding the design made in answer to question part (a).
Two components may be presented here (full marks can be gained for just one):

- Knowledge of methodology, specifically that of an observation.
- Knowledge of the McKinstry and Wang study.

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Sport

Section A

21 (a) Describe the NEO (Neuroticism-Extroversion-Openness) Personality Inventory. [3]

Most likely:
The **Revised NEO Personality Inventory**, or **NEO PI-R** (revised) was originally the Neuroticism-Extroversion-Openness Inventory. It is a 240-item measure of the Five Factor Model: Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience (mnemonic OCEAN or CANOE). It measures six subordinate dimensions (known as 'facets'). The test was developed by Costa and McCrae for use with adult (17+) men and women. The short version, the NEO-Five Factor Inventory (NEO-FFI), has 60 items.

3 marks for accurate and detailed description of NEO with clear understanding.
2 marks for accurate description of NEO with some understanding.
1 mark for vague description of NEO with little understanding.

(b) Suggest how the reliability of this measure could be tested. [3]

Most likely:
Candidates should be able to say what reliability is, suggest an appropriate way to test reliability and relate this to the measure in question, the NEO.
Reliability is how consistent something is. The reliability of a questionnaire can be checked in two main ways:

- **test-retest method:** a system for judging how reliable a psychometric test or measure is which involves administering the same test to the same person on two different occasions, such as three weeks apart, and comparing the results. The results could then be correlated.
- **split-half method:** this involves splitting the test into two and administering each half of the test to the same person. The scores from the two halves should be the same (but only if certain test items are balanced equally).

3 marks for definition, relevant test and related to the NEO.
2 marks for aspects above but less well done, or two of above aspects only.
1 mark for one or two aspects of above that are basic, or basic overall sentence.
0 mark for any comment about inter-rater reliability which isn't applicable to a questionnaire.

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(c) Suggest how the validity of this measure could be tested. [3]

Most likely:
Candidates should be able to say what validity is, suggest an appropriate way to test validity and relate this to the measure in question, the NEO.
Validity is concerned with whether an experiment or procedure for collecting data actually measures or tests what it purports or claims to measure or test. There are several types of validity:

- **concurrent validity:** a method for assessing validity by comparing it with some other measure that has been taken at the same time, that is, which is occurring concurrently.
- **construct validity:** a method for assessing validity by seeing how it matches up with theoretical ideas about what it is supposed to be measuring.
- **criterion validity:** a method for assessing validity by comparing it with some other measure. If the other measure is assessed at roughly the same time as the original one, the type of criterion validity being applied is concurrent validity; if it is taken much later, it is predictive validity.
- **face validity:** the degree to which a test or measure appears on the surface as though it probably measures what it is supposed to.
- **predictive validity:** a method of assessing validity by seeing how well the test correlates with some other measure, which is assessed later, after the test has been taken.

3 marks for definition, relevant test and related to the NEO.
2 marks for aspects above but less well done, or two of above aspects only.
1 mark for one or two aspects of above that are basic, or basic overall sentence.

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22 From the study by Widmeyer et al on predicting cohesion in a coacting sport:

(a) What were the hypotheses (or purposes) that were proposed? [3]

Quoting directly from the article:
The first purpose of this study was to determine if each of these variables was a significant predictor of cohesion in coacting as well as interacting sports.
The purpose of the second study was to determine the contribution that each of these variables makes to the prediction of cohesion.

3 marks for appropriate and detailed description of hypotheses with understanding.
2 marks for appropriate description of hypotheses with some understanding.
1 mark for basic description of hypotheses with limited understanding.

(b) Describe <u>one</u> of Carron's 'team factors'. [3]

Most likely (any appropriate disadvantage to be given credit):
Carron (1982, 1988) identified four categories of antecedents of cohesion. These are: environmental factors; personal factors; leadership factors and team factors. Team factors include:

- Prior performance success ("there is nothing like success to increase morale or group spirit. A near universal finding is that cohesiveness increases with success").
- Communication among team members ("group members come to possess similar beliefs, hold similar attitudes, and increase the pressure on conformity to the group norms").
- Team goal variables ("Not only is having a group goal seen as important for developing group cohesion but also is the importance of the group goal").

3 marks for accurate and detailed description of appropriate team factor with clear understanding.
2 marks for accurate description of appropriate team factor with some understanding.
1 mark for vague description of appropriate team factor with little understanding.

(c) Using an example, outline the difference between coacting sports and interacting sports. [3]

Most likely (any appropriate feature to be given credit):

- Interacting sports include basketball, field hockey, ice hockey, football, rugby, etc. These are interacting because team members co-ordinate their efforts and performances to produce a team performance outcome.
- Coacting sports such as golf, an athletics relay race, etc. is where a team's performance outcome is simply the sum of individual performance outcomes.

3 marks for accurate and detailed difference and example with clear understanding.
2 marks for accurate description of difference and example with some understanding.
1 mark for vague description of difference and example with little understanding.

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Section B

23 (a) Describe theory and research on the effects of an audience. [12]

From specification:
Theory:
Social facilitation and inhibition:
- Audience and co-action effects: Triplett (1898).
- Zajonc's 'mere presence' (1965).
- Cottrell's evaluation apprehension (1968).

Research:
- Social facilitation in animals (Zajonc et al, 1969)
- Social loafing in humans: Kerr and Brun (1981)

Key study: Waters, A. and Lovell, G. (2002) An Examination of the Homefield Advantage in a Professional English Soccer Team from a Psychological Standpoint. Football Studies, 5, 1, 46–59.
Applications: Home advantage: familiarity, referee bias, aggression, crowd size and noise.

(b) Evaluate theory and research on the effects of an audience. [16]

Any appropriate evaluative point to receive credit.
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.

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24 (a) Describe the key study by Moore et al on spectator aggression. [12]

Abstract of study:
Background Alcohol, aggression and assault injury are strongly associated with popular sporting events, but mediating factors are not clear.
Aims To explore aggression, happiness and plans to consume alcohol among spectators before and after sports matches.
Methods Cross-sectional surveys of male rugby football fans at an international stadium generated four groups: a pre-match group of 111 men, and three post-match groups of supporters, 17 whose team had won, 23 whose team had lost and 46 whose team had drawn. Consenting participants were assessed using the assault sub-scale of the Buss-Durkee Hostility Inventory, on a self-rating of happiness (Likert scale), for planned alcohol consumption and demographic variables. Pre- and post-match group mean responses were compared.
Results Analyses were performed on 197 male spectators (mean age 42 years). Spectators in 'win' ($z = 2.63$, $p < 0.01$) and 'draw' ($z = 2.76$, $p < 0.01$) groups rated themselves as more aggressive than those in the pre-game group, but those in the losing group did not ($z = -0.03$, $p > 0.05$). No differences, however, were observed between pre-match, 'win', 'draw' or 'lose' groups on the decision to drink after the match. Winning did not increase happiness ($t = 0.25$, $p > 0.05$), but losing ($t = 2.09$, $p < 0.05$) or drawing ($t = 7.\ 6\ 4$, $p < 0.001$) decreased it.
Conclusions This study suggests that team success but not failure may increase aggression among supporters, and that aggression, not celebration, drives post-match alcohol consumption. Losing and drawing decreased happiness but winning did not increase it. Better understanding of pathways to violence in these circumstances will pave the way for more effective prevention and management strategies.

(b) Evaluate the key study by Moore et al on spectator aggression. [16]

Any appropriate evaluative point to receive credit.
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.

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Section C

25 Passing examinations often results in an attribution in favour of the student, whereas failing is often blamed on a teacher or an examiner! The same attributions might apply to team sports.

(a) Using your knowledge of psychology, design a self-report study to determine the attributions made by team members at your school or college. [8]

In this question part candidates are either directed to design a study based on a named method or are free to suggest any way in which the assessment request could be investigated. Each answer should be considered individually as it applies to the mark scheme. As the question is a self-report candidates should be designing an interview (structured or unstructured) or a questionnaire (open or closed) and each of these showing appropriate methodological knowledge.

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

In this question part candidates are expected to justify his or her decisions or evidence presented regarding the design made in answer to question part (a).
Two components may be presented here (full marks can be gained for just one):

- Knowledge of methodology, specifically that of a self-report.
- Knowledge of attribution theory.

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