

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS General Certificate of Education Advanced Subsidiary Level and Advanced Level

#### PSYCHOLOGY

Paper 3 Written SPECIMEN MARK SCHEME 9698/03 For Examination from 2012

3 hours

### **MAXIMUM MARK: 80**

This document consists of 14 printed pages.



Each option has three questions:

#### A short answer question: (a) = 2 marks, (b) = 4 marks

#### An essay question: (a) = 8 marks, (b) = 12 marks

#### An applications question: (a) = 6 marks, (b) = 8 marks [choice of questions]

In order to achieve the same standard across all options, the same mark schemes are used for each option. These mark schemes are as follows.

#### Short answer question: (a) = 2 marks

No answer or incorrect answer.	0
Basic or muddled explanation. Some understanding but brief and lacks clarity.	1
Clear and accurate and explicit explanation of term.	2

#### Short answer question: (b) = 4 marks

No answer or incorrect answer.	0
Anecdotal answer with little understanding of question area and no specific reference to study.	1
Basic answer with some understanding. Reference to named study/area only. Minimal detail.	2
Good answer with good understanding. Study/area included with good description.	3
Very good answer with clear understanding of study/area with detailed and accurate description.	4

### Essay question: (a) = 8 marks

No answer or incorrect answer.	0
Definition of terms and use of psychological terminology is sparse or absent. Description is mainly inaccurate, lacks coherence and lacks detail. Understanding is poor. The answer is unstructured and lacks organisation.	1–2
Definition of terms is basic and use of psychological terminology is adequate. Description is often accurate, generally coherent but lacks detail. Understanding is reasonable. The answer is lacking structure or organisation.	3–4
Definition of terms is mainly accurate and use of psychological terminology is competent. Description is mainly accurate, coherent and reasonably detailed. Understanding is good. The answer has some structure and organisation.	5–6
Definition of terms is accurate and use of psychological terminology is comprehensive. Description is accurate, coherent and detailed. Understanding is very good. The answer is competently structured and organised.	7–8

### Essay question: (b) = 12 marks

No answer or incorrect answer.	0
Evaluation (positive and negative points) is basic. Range of points is sparse and may be only positive or negative. Points are not organised into issues/debates, methods or approaches. Sparse or no use of appropriate supporting examples which are peripherally related to the question. Analysis (key points and valid generalisations) is very limited or not present. Evaluation is severely lacking in detail and understanding is weak.	1–3
Evaluation (positive and negative points) is limited. Range of points is limited. Points hint at issues/debates, methods or approaches. Poor use of supporting examples. Analysis (key points and valid generalisations) is sparse. Evaluation is lacking in detail and understanding is sparse.	4–6
Evaluation (positive and negative points) is good. Range of points is good and is balanced. Points are 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 has good detail and understanding is good.	7–9
Evaluation (positive and negative points) is comprehensive. Selection and range of points is very good 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 understanding is thorough.	10–12

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Application question: (a) = 6 marks

No answer or incorrect answer.	0
Vague attempt to relate anecdotal evidence to question. Understanding limited.	1–2
Brief description of range of appropriate evidence with some understanding.	3–4
Appropriate description of good range of appropriate evidence with clear understanding.	5–6

### Application question: (b) = 8 marks

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No answer or incorrect answer.	0
Suggestion is mainly inappropriate to the question and vaguely based on psychological knowledge. Description of explanation is mainly inaccurate, lacks coherence and lacks detail. Understanding is poor.	1–2
Suggestion is largely appropriate to the question and based largely on psychological knowledge. Description of explanation is often accurate, generally coherent but lacks detail. Understanding is limited.	3–4
Suggestion is appropriate to the question and based on psychological knowledge. Description of explanation is mainly accurate, coherent and reasonably detailed. Understanding is good.	5–6
Suggestion is appropriate to the question and based explicitly on psychological knowledge. Description of explanation is accurate, coherent and detailed. Understanding is very good.	7–8

#### Psychology and Education

#### 1 (a) Explain, in your own words, what is meant by the term 'teaching style'. [2]

Typically: way in which the teacher teaches.

#### (b) Describe one way in which learning styles have been measured. [4]

Most likely: Kolb's 'kite' model. Myers-Briggs type indicators also a possibility.

## 2 (a) Describe what psychologists have discovered about motivation and educational performance. [8]

Traditional theories of motivation could be considered (such as **Freud** and instinct theory, **Maslow's** hierarchy of needs etc.) but these must be related to education in some way to be creditworthy. Candidates can be motivated by many different things and here they can legitimately write about self-fulfilling prophecy, locus of control, attribution theory etc.

Most likely answers:

Behaviourist: emphasises extrinsic praise and reward. Brophy (1981) lists guidelines for effective and ineffective praise.

Humanistic: emphasises intrinsic motivation. The theories of Maslow (1970) self actualization, **White** (1959) competence motivation and **Bandura** (1981) self-efficacy are relevant.

Cognitive: attribution theory of **Weiner** (1974) is relevant as is **Rotter's** locus of control.

Other: **McClelland** (1953) achievement motivation and **Birney** (1969) motivated due to fear of failure.

(b) Both cognitive and behaviourist perspectives have contributed to our understanding of motivation and educational performance. Use your knowledge of what psychologists have discovered about motivation and educational performance to discuss which of these perspectives has made the greatest contribution. [12]

Effective argument may be based on:

- direct comparison between theories
- supporting and/or conflicting evidence
- whether the theory works in practice
- a mixture of these.

The best answers will have a balance of arguments.

Candidates could legitimately draw on material from other sections of the option, such as the value of an approach in explaining/overcoming problems with special educational needs or disruptive behaviour, where it is relevant to motivation or performance.

- 3 Derek is a new teacher. He has a class of six-year-olds. He wants to make subjects like history and geography interesting for them. He has found out about different cognitive theories of learning on his teaching course.
  - (a) Describe how one named cognitive theory helps to explain children's learning. [6]

Most likely: **Piaget** (e.g. thinking, stages, errors) **Bruner** (e.g. modes) **Ausbel** (e.g. reception learning) **Vygotsky** (e.g. zone of proximal development)

### (b) Suggest how Derek could teach a named school subject using the theory you have described in part (a). [8]

Answer should make reference to a specific subject/subject area to gain credit and must apply theory previously described. If there is no detectable theory in (a) but the ideas in (b) can be related to a theory, credit (b) on that basis.

Most likely: **Piaget** (e.g. discovery learning, readiness approach) **Bruner** (e.g. discovery using different modes) **Ausbel** (e.g. expository teaching) **Vygotsky** (e.g. scaffolding, peer work)

- 4 Tatiana is the teacher of a class of ten-year-olds. She has one child who is disruptive because he continually gets out of his seat and walks around the classroom. Tatiana wants to know how she can correct this behaviour.
  - (a) Describe one corrective strategy for disruptive behaviour.

[6]

Typically behaviour modification techniques (Presland, 1990); cognitive behaviour modification e.g. self instructional training (Meichenbaum, 1971), but any **one** appropriate strategy would suffice. No credit for a preventative strategy.

### (b) Using evidence, explain how Tatiana would use this corrective strategy in her classroom. [8]

Here the candidate needs to describe how the strategy would actually work with the child in question. A description of the process and understanding of the strategy is essential.

#### Psychology and Health

#### 5 (a) Explain, in your own words, what is meant by 'health promotion in schools'. [2]

Typically: enhancing good health (often specific problems such as diet, STDs) and preventing illness.

#### (b) Outline the Yale model of communication.

Important factors in persuasive communication are:

- source of message (e.g. expert? trustworthy?)
- features of message (e.g. 1 or 2-sided? clear? vivid?)
- medium used to convey message (e.g. personal, TV, radio?)
- target of the message (audience? are they knowledgeable? sympathetic?)
- situation of receiver when they receive the message (where will they be?)

List of factors is only a partial response. A full answer should provide some detail/example for each.

## 6 (a) Describe what psychologists have discovered about the patient-practitioner relationship. [8]

Question stresses practitioners and patients and so should answers.

Answers could focus on:

Lorber (1975) distinguishes between 'good' and 'bad' patients Diagnosis and information processing (Elstein and Bordage, 1979) type 1 and type 2 errors Interpersonal skills: non-verbal communications Communication skills: accent, native language Provision of information (a) about illness; (b) about diagnosis and treatment Organisation of setting e.g. seating positions Attitudes of doctor (practitioner style) and attitudes of patients (patient style) Health beliefs

# (b) Psychologists have explored adherence to medical advice by collecting both qualitative and quantitative data. Evaluate the usefulness of qualitative and quantitative data in investigating adherence to medical advice. [12]

To access full range of marks answer must be linked to research about medical advice at least once for each of qualitative and quantitative data.

#### Quantitative:

Advantages – allows for collecting large amounts of data such as about patients' understanding of practitioners' advice so likely to be representative of views in general. Can use simple questions such as 'Would you find it easier to understand a same-gender GP?' so can ask lots of them.

Disadvantages – likely to produce response bias if there are many similar questions e.g. a list of the importance of different factors affecting adherence. Does not allow for in depth answers as collecting qualitative data would, e.g. the reasons behind people's decision to ignore advice. Participants forced to choose between options which may not exactly represent their views e.g. if the factor that causes them to forget is not listed.

*Qualitative* – reverse arguments.

[4]

- 7 Jane is a hospital nurse. One of her jobs is to assess how much pain patients are in and she is used to using self-report methods. She has moved from a ward with adult patients to a children's ward.
  - (a) Describe how Jane could assess pain in the children. [6]

Most likely:

Paediatric Pain Questionnaire (Varni and Thompson, 1976)

Could also use McGrath (1987) Children's Comprehensive Pain Questionnaire or suitable general techniques such as behavioural assessment, category scales or visual-analogue scales. Apocis – pain observation scale (seven types of pain-related behaviour in newborns: crying, how it breathes, how it moves its arms and fingers, how it moves its legs, posture of the back and body and facial expression (grimace, wrinkled up nose, frown). Gives total score from no pain (0) to severe pain (5–7).

Could describe more than one measure but a thorough description of a single appropriate measure should allow the candidate to gain full credit.

Adult measures such as McGill Pain Questionnaire and general self-report measures are not suitable.

### (b) Explain why this measure of pain is more suitable for children than methods Jane might have used with adult patients. [8]

Assessment of pain in children is generally unreliable. Use of adult measures invalid as children experience and express pain differently from adults. Some methods unusable (may be too young to talk/not have sufficient self-awareness (e.g. of internal/external pain), reading skill or vocabulary to express themselves). May be important for assessor to know child well/build up good rapport.

Ideas such as these must be discussed in relation to the measure(s) described in (a).

### 8 Habacuc is a heart surgeon. However, he thinks that his patients do not always recover quickly because they do not always take the medicine he prescribes.

### (a) Describe what advice psychologists could give to Habacuc about measuring adherence to medical requests objectively in his patients. [6]

The question is on measuring and not reasons for non-adherence. Non-adherence can be measured subjectively: through self reports of patients (e.g. Riekart and Droter, 1999). It can also be measured objectively through pill counting (e.g. Chung and Naya, 2000); biochemical tests (e.g. Roth 1987); repeat prescriptions (e.g. Sherman, 2000).

### (b) Explain why you think an objective measure would be more suitable for Habacuc to use than a more subjective measure. [8]

Candidates must consider the relative strengths and weaknesses of both objective and subjective measures and decide which would be most suitable for the heart surgeon. Objective is more 'scientific' but pill counts have weaknesses. Subjective reports are least useful as patients may not tell the truth. Maybe number of appointments kept is the perfect indicator.

#### Psychology and Environment

#### 9 (a) Explain, in your own words, what is meant by 'urban renewal'. [2]

Typically: the integrated steps taken to maintain and upgrade the environmental, economic and social health of an area.

#### (b) Describe one study showing the effects of urban living on social behaviour, such as Amato (1983).

Social behaviour can include: anti-social behaviour and pro-social behaviour.

**Amato** (1983) study in 55 different Australian communities. A man limped down a street then screamed, fell over and clutched his leg which began bleeding profusely.

Small town (under 1,000 inhabitants) 50% stopped to help.

In a city of 20,000–30,000 this dropped to 25%. Down to 15% in major cities with over 1 million inhabitants. These findings have been confirmed in studies carried out in countries such as Israel, Turkey, The Sudan, Australia and Britain.

An alternative would be:

**Altman** (1969) had participants knock on a door explaining that they were visiting a friend and that they had lost the address. They still had the number and could they possibly use the phone to call their friend. Do you think that people would let them in? Altman found that a woman was admitted to about 94% of the small-town homes but only to 40% of the city homes; a man was admitted to about 40% of the small town homes but only 14% of the city homes.

### 10 (a) Describe what psychologists have discovered about natural disaster and/or technological catastrophe. [8]

Description may begin with the distinction between **disasters** (natural causes) and **catastrophes** (human causes – in which there is some human error/fault and blame can be attributed). Candidates can access full range of marks with either option or a combination. They can also legitimately take different approaches e.g. looking at behaviour during emergencies, preventing panic, preparation for an event, behaviour after an event, toxic exposure.

#### Most likely answers:

**Behaviour during emergencies**: e.g. Archea (1990) comparison of behaviour during earthquakes in Japan and America; LeBon (1895) suggested people behave like wild animals with primitive urges and stampede and are crushed (e.g. in fires); although this can happen even when there is no stampede (e.g. Hillsborough); panic is not inevitable – Smesler (1964) suggests people don't panic in mines/submarines due to escape routes; Sime (1985) found that people in fires seek companions first and do not behave like wild animals.

**Preventing panic**: evacuation messages (Loftus); follow me/follow directions dilemma (Suigman and Misumi, 1988).

**Preparation for an event**: will it happen to me? (Stallen, 1988), study at Dutch chemical plant.

Behaviour after an event: post traumatic stress (e.g. Herald of Free Enterprise).

**Toxic exposure**: e.g. Three Mile Island accident raised fears about release of radioactive gases.

Sick building syndrome is not an example of a technological catastrophe and should not receive credit.

## (b) Evaluate what psychologists have discovered about natural disaster and/or technological catastrophe in terms of the validity of the research. [12]

Evaluation must focus on validity. Several approaches are creditworthy, e.g. focusing on methodologies used to investigate disasters/catastrophes or considering the specific research described in **(a)**. The answer must relate to research into disasters/catastrophes rather than simply being general. Any kind of validity is acceptable.

The best answers will explore different aspects of validity or give examples of both strengths and weaknesses in validity.

#### Most likely answers:

Lab experiments typically have high experimental validity due to controls but are rarely good representations of disaster scenarios so lack ecological validity. Practically difficult to replicate and dangerous so also unethical. Simulations are more true to life (e.g. simulation following Manchester airplane fire) but participants know it is a simulation so responses such as panic are less real. Actual events would have high validity but not ethical to study injured or distressed people. Could not exert control over actual situations and there would be no comparison groups so different validity problems. Population validity problems may arise if there are cultural differences in response to emergencies as findings may not generalise.

- 11 Konrad is the manager of a large shop. He thinks that playing music will encourage shoppers to spend money. He is trying to find out what sort of music to play, and how it will affect the shoppers. He is also concerned about the effect the music will have on his staff in terms of their performance.
  - (a) Describe how music can affect performance.

[6]

Answer must focus on music, not noise.

Most likely: Mozart effect e.g. Rauscher, Shaw and Ky (1993) – spatial reasoning improves with music: compared to relaxation music and silence, a Mozart sonata produced temporary increase in spatial IQ of 8–9 points.

Could use counterargument to stress reducing performance (e.g. Chafin, 2004).

#### (b) The staff need to perform tasks such as stacking shelves and attending to customers. Use evidence to explain how the music might affect their performance. [8]

Answer must include some empirical research. Does not have to link explicitly to effect on behaviours in question (shelf stacking/attending to customers) but must be in context.

Typically:

Upbeat music can raise optimum level of arousal, improving performance. Pleasant music can improve mood and therefore productivity. Music can increase vigilance so improve performance. Rauscher, Shaw and Ky (1993) showed improvement in spatial reasoning (replicated by Rideout and Taylor, 1997). However, counter-evidence exists to all these arguments, so candidates can use evidence either way.

Could also use research on stress reduction or changes in consumer behaviour *if* linked to performance.

### 12 Eseci goes to the shops by bus, but she does not like doing so because the bus is always very crowded and this causes her a lot of stress.

## (a) Describe ways in which Eseci could reduce the effects of crowding on public transport. [6]

The question allows both preventing crowding or learning how to cope with crowding (e.g. Langer and Saegert, 1977; Karlin et al, 1979) to be considered. Both coping strategies involve increasing cognitive control.

#### (b) Explain how you would find out whether Eseci's stress had been reduced. [8]

This is an environment question and not health, so measures such as 'life events' receive no credit. Typically candidates will consider the study by Lundberg (1976) where urine samples were taken to measure levels of 'stress' hormone.

#### Psychology and Abnormality

#### 13 (a) Explain, in your own words, what is meant by 'classifying abnormality'. [2]

Typically: placing an abnormality into a category on DSM or ICD. 1 mark if no reference to ICD or DSM.

#### (b) Describe one way in which abnormality is classified. [4]

Most likely: can be major categories e.g. neuroses or psychoses or can be more precise e.g. agoraphobia is an abnormal avoidance; depression is the effect, etc.

[8]

#### 14 (a) Describe what psychologists have learned about schizophrenia.

Likely answers could focus on types, symptoms/characteristics or explanations. Any approach can access full marks, as could a mixture.

- **types**: e.g. catatonic, paranoid
- **symptoms/characteristics**: e.g. positive/negative symptoms; delusions, hallucinations, flattened effect etc.
- **explanations**: genetic e.g. Gottesman and Shields (1972); biochemical e.g. dopamine hypothesis; cognitive e.g. Frith (1992).

# (b) Some theories of schizophrenia take a nature perspective, others a nurture perspective. Use evidence to justify why either nature or nurture is more important in explaining schizophrenia. [12]

Likely approaches:

**nature**: genetic explanations e.g. Gottesman and Shields (1972); biochemical explanations e.g. dopamine hypothesis.

**nurture**: criticisms of genetic and biochemical explanations, influence of childhood experience on cognition.

Effective answers could argue from either viewpoint. The best answers are likely to have some evidence for each side of the debate but this does not have to be balanced.

15 Dr Phillips has two patients with depression. One, Kate, is a new patient who has never had depressive symptoms before but is finding coping very difficult indeed. The other patient, Sally, has been depressed for a long time and Dr Phillips has tried all kinds of different treatments without much success.

#### (a) Describe one suitable treatment for Kate.

[6]

Any treatment for depression is acceptable here. Answer must focus on one treatment option.

Most likely: **chemical/drugs**: monoamine oxidase inhibitors, selective serotonin reuptake inhibitors **electro-convulsive therapy cognitive restructuring** (Beck, 1979) **rational emotive therapy** (Ellis, 1962)

### (b) Name one suitable treatment for Sally that is *different* from the one you described for Kate. Explain why this choice is more appropriate for Sally. [8]

Any treatment for depression other than the one described in (a) is acceptable here. Answer must focus on one treatment option.

Most likely arguments for alternative:

Sally has been depressed for longer so it is the second treatment. It is more effective. It has greater risks/side effects so not first choice of treatment. Sally has proved resistant to treatment so might need to consider alternative.

# 16 Dr Euripedes works in a mental health unit caring for patients with schizophrenia. Most of the patients have been given anti-psychotics and electroconvulsive therapy. Dr Euripedes believes that their behaviour can best be improved using a token economy system.

(a) Describe how the cognitive approach explains schizophrenia. [6]

Any cognitive explanation is acceptable. The most likely explanation will be that by Frith (1992) because that is the study on the syllabus.

## (b) Use evidence to explain how a token economy system could help Dr Euripedes to improve the behaviour of his patients. [8]

A description of the token economy system is needed, and candidates may well explain the underlying basis of positive reinforcement: a reward for a desirable behaviour. Candidates may also base their answer on the study by Paul and Lenz (1977) who used a token economy with schizophrenic patients.

#### **Psychology and Organisations**

#### 17 (a) Explain, in your own words, what is meant by 'need theory of motivation'. [2]

A need is an essential requirement that a person must have. For Maslow there were basic needs such as physiological and safety needs. For McClelland (1965) needs were related specifically to the world of work.

#### (b) Outline the theory of achievement motivation proposed by McClelland (1965). [4]

McClelland proposed a need theory suggesting we have a need for achievement, a need for affiliation and a need for power. He also outlined the need to avoid failure. Those with a need to achieve prefer to master a task or situation, prefer working on tasks of moderate difficulty, prefer work in which the results are based on their effort rather than on luck, and prefer to receive feedback on their work.

#### 18 (a) Describe what psychologists have discovered about leadership and management. [8]

Typically: theories of leadership, such as Universalist and Behavioural. Also likely is leadership style and effectiveness, such as contingency theory (Fiedler, 1976), situational leadership (Hersey and Blanchard, 1988), and path-goal theory (House 1979). Candidates may also consider leadership styles and leadership training and the characteristics of effective leaders. Leaders and followers such as the leader-member exchange model (e.g. Danserau, 1994) and normative decision theory (Vroom and Yetton, 1973) may also be included.

### (b) Some psychologists believe that leaders are born and others believe that they are made. Evaluate the usefulness of the nature/nurture debate applied to leadership. [12]

Candidates must understand the assumptions underlying various theories in order to categorise them as nature or nurture. They must also know something about the nature/nurture debate. But is knowing this *useful*?

[6]

19 Edward is frustrated. His senior management team never seem to be able to make a decision. When one of them makes a proposal another argues for the opposite. They often end up arguing.

#### (a) Describe explanations of groupthink and group polarisation. [6]

Groupthink: syndrome characterised by a concurrence-seeking tendency that overrides the ability of a cohesive group to make critical decisions (Janis, 1965) and group polarisation: groups who make decisions that are more extreme than those made by individuals.

### (b) Explain how Edward can avoid groupthink to prevent his team from making poor decisions. [8]

The syllabus includes the sentence: 'strategies to avoid groupthink and training to avoid poor decisions (e.g. Bottger and Yetton, 1987)', so candidates should have no problem in providing an answer.

### 20 Eliani is a consultant organisational psychologist. She has been invited by the manager of a large organisation to investigate low levels of job satisfaction in his workers.

#### (a) Describe one theory explaining attitudes to work.

Attitudes to work includes theories of job satisfaction and dissatisfaction (e.g. Herzberg, 1959), job withdrawal, absenteeism and sabotage. It also includes organisational commitment and how to promote job satisfaction.

#### (b) Explain how Eliani can measure the job satisfaction of the workers. [8]

This question requires a consideration of what Eliani can do to measure job satisfaction. The syllabus lists rating scales and questionnaires: e.g. job description index, Minnesota satisfaction questionnaire and also the critical incidents technique along with interviews.