



PSYCHOLOGY

Stage 2

WACE Examination 2012

Marking Key

Marking keys are an explicit statement about what the examiner expects of candidates when they respond to a question. They are essential to fair assessment because their proper construction underpins reliability and validity.

When examiners design an examination, they develop provisional marking keys that can be reviewed at a marking key ratification meeting and modified as necessary in the light of candidate responses.

Section One: Research methods

20% (20 Marks)

Question 1

(10 marks)

An experiment was conducted to determine the effect of meditation on memory. Researchers randomly divided 100 Year 11 students into two groups, with 50 participants in each group. Group One participated in 20 minutes of meditation before the test while Group Two did not participate in meditation. All participants sat a memory recall test at the same venue at the same time. The test required participants to recall as many words as possible from a list of 20 words they had been shown earlier.

- (a) What is the independent variable? (1 mark)

Description	Marks
Meditation (or application of independent variable vs no meditation)	1
Total	1

- (b) List **two (2)** variables the researchers controlled in this study. (2 marks)

Description	Marks
Any two of: education level/ venue/ time/age One mark each	1-2
Total	2

- (c) Write an operational hypothesis for this study. (3 marks)

Description	Marks
One mark each for: 20 minutes of meditation/ memory recall test/ year 11 students. E.g. 20 min meditation will improve the memory recall test scores of year 11 students.	1-3
Total	3

- (d) Identify **two (2)** ethical considerations relevant to this study. For each consideration, identify how the researchers should deal with it. (4 marks)

Description	Marks
One mark for ethical consideration and one mark for appropriate action. Informed consent/ Underage participants: guardians receive information and sign to agree to participation. Withdrawal rights: can leave study any time without ramifications/ pressure Do no harm: meditation and study will not harm participants Do some good: proof that meditation can be beneficial to memory Confidentiality: share no personal details Anonymity: assign numbers to participants to avoid identification Voluntary participation	1-4
Total	4

Question 2

(10 marks)

Researchers wanted to determine whether eating a healthy lunch improved mood. A sample of 10-year old boys was provided with a healthy lunch consisting of a sandwich and fruit. The boys were then asked to rate their mood on a 10-point scale. The responses were rated to give a 'mood score' where 10 was the most positive. The results are shown in the table below.

Participant	Mood score
1	2
2	1
3	7
4	6
5	2
6	2
7	1

- (a) Is there an evidence-based conclusion the researchers could draw from this study? (1 mark)

Description	Marks
No (evidence based conclusion possible)	1
Total	1

- (b) This research method was criticised for having poor reliability. Define reliability as it is used in psychological research. (1 mark)

Description	Marks
Same results gained when test repeated/ test-retest.	1
Total	1

- (c) This research method was criticised for having poor validity. Define validity as it is used in psychological research. (1 mark)

Description	Marks
The test measures what it is supposed to measure.	1
Total	1

- (d) Calculate the mode, mean and median mood score from these results. (3 marks)

Description	Marks
Mode: 2 Mean: 3 Median: 2	1-3
Total	3

- (e) Identify **two (2)** sources of error in this experimental design. For each source of error, state how the design could be improved. (4 marks)

Description	Marks
One mark for each design error and one mark for the appropriate improvement: Small sample size: increase participant numbers No control group/basis for comparison: have control group without healthy lunch No controlled variables: state the variable that was uncontrolled then describe how to control it. E.g. boys could have had different food prior to test - ensure have no food prior to lunch/ control diet. Unrepresentative sample (only boys): mix of genders	1-4
Total	4

Section Two: Topic-related content

50% (50 Marks)

Question 3: Biological Influences

(9 marks)

- (a) Hormones are chemical messengers that affect the functioning of the human body.
List **two (2)** effects of the hormone adrenaline. (2 marks)

Description	Marks
One each for any two of: increased heart rate/ increased breathing rate/ pupil dilation/ decreased blood flow to gut/ increased blood flow to skeletal muscle/ increased speed of reaction/ decreased reaction time/ surge of energy/ decreased pain Any other correct response	1–2
Total	2

- (b) Give an example of a real-life situation in which the release of adrenaline would occur. (1 mark)

Description	Marks
Any logical correct response involving a stressful event. E.g. car accident, fight, public speaking, sport, racing	1
Total	1

- (c) Complete this table: (6 marks)

Description			Marks
One mark available for each box in table. Any logical correct response/ note that EFFECT must be behavioural including colloquial responses.			1–6
Class of recreational drug	One (1) effect on behaviour	Example of this category of drug	
Hallucinogen	See/hear/sense things that aren't real/change perceptions/insomnia/ violence/change in appetite.	LSD / magic mushrooms (psilocybin)/ ecstasy / marijuana	
Depressant	Calm the activity of the nervous system slow reaction speeds/ slur speech/ drowsiness/ changes in appetite	Alcohol / ketamine / GHB / marijuana	
Stimulant	Excite the nervous system irritability/ aggression/ jittery/ insomnia	Amphetamines (ice, speed)/ caffeine (no-doze) / cocaine / ecstasy / nicotine	
Total			6

Question 4

(10 marks)

- (a) Describe **two (2)** key ideas in Francis Galton's theory of intelligence. (2 marks)

Description	Marks
Any two of: A general ability/ showed itself in different ways in different environments (individual differences)/ could be measured by simple tests	2
Total	2

- (b) According to Howard Gardner there are nine different types of intelligence. Name and describe any **four (4)** of these types of intelligence. (8 marks)

Description	Marks
1 mark for name. 1 mark for correct description Any four of: Linguistic – use spoken and written language/ability to learn and use language Logical/mathematical – ability to analyse/solve problems and think scientifically Musical – Ability to perform and compose music, to appreciate rhythm, tone, pitch Bodily(kinaesthetic) – use of body or its parts to solve problems, coordination Spatial – Ability to use large and small spaces, to form and use visual images of objects Interpersonal – ability to understand the intentions, desires and thoughts of others Intrapersonal – ability to understand self and own thoughts, feelings and intentions Naturalistic – nurturing and relating information to one's natural surroundings classifying natural forms such as animal and plant species Existential – ability to contemplate phenomena or questions beyond sensory data, such as the infinite and infinitesimal, spiritual or religious intelligence	1–8
Total	8

Question 5

(10 marks)

- (a) Name **two (2)** personality traits that might be used to predict success in professions or sports. Describe how each trait could contribute to success. (4 mark)

Description	Marks
Any two reasonable answers such as: Psychoticism – recklessness or disregard for common sense – willing to take risks Openness to experience – daring – adventurous – needed to take risks and go beyond others Conscientiousness – hardworking, organised – willing to practice over and over Emotional stability – ability to remain calm under pressure / manage stress	1 mark each for trait and 1 mark for contribution
Total	4

- (b) Identify and describe **three (3)** factors that might motivate a person to pursue sporting or artistic endeavour at a high level. (6 marks)

Description	Marks
Description of any three of inherently satisfying, challenging, enjoyable (intrinsic motivation), rewards such as financial or for accolades or status (extrinsic motivation). May not always be positive. Inclusion of examples of negative extrinsic motivation is also correct e.g. pressure from parents. Listing is not sufficient, must have brief description. 1 mark for naming, 1 mark for description for each factor	2 marks for each
Total	6

Question 6

(11 marks)

- (a) Define 'status'.

(1 marks)

Description	Marks
Status refers to the prestige of various roles in our society / describes the relative social position of a person.	1
Total	1

- (b) Compliance and conformity are similar in that they involve a change of behaviour. Describe **two (2)** ways in which compliance and conformity are different. (4 marks)

Description	Marks
2 marks each way they differ (1 for listing, 1 for describing). Examples include: <ul style="list-style-type: none"> motivation for change (compliance is involuntary, conformity is voluntary) underlying opinions/beliefs (compliance involves no change, conformity and change) motivation (compliance and avoid punishment, conformity to be included) 	4
Total	4

- (c) Name and describe **three (3)** ways in which an individual may demonstrate social power within a group. (6 marks)

Description	Marks
Must have description – any three of: Reward power – the ability to give rewards for compliance Coercive power – the ability to give punishment for non-compliance Information power – the other person's belief that the person with power has more information than them Expert power – the other person's belief that one has greater knowledge and expertise than them Legitimate power – the other person's belief that one is authorised by a recognised power structure to make decisions and issue commands Referent power – identification with or respect for the source of influence	2 marks for each correct
Total	6

Question 7

(10 marks)

- (a) Stereotypes are a form of social categorisation. Define 'social categorisation' and state **one (1)** way in which it may be helpful. (2 marks)

Description	Marks
Social categorisation is the process of identifying a person as a member of a group because of the features they share. It saves us from having to deal with all unique aspects of every individual we meet – a sort of mental shorthand. It is an easy way to classify people. Helpful to know who the police are (by their uniform) or which students belong in the schoolyard. Accept any reasonable answer.	1 mark for definition 1 mark for usefulness
Total	2

- (b) A person may be stereotyped because of their race or ethnicity. Name **two (2)** other ways a person could be stereotyped. (2 marks)

Description	Marks
Any two of age, gender, religion, sexual preference, appearance (clothing, hairstyle, tattoos), accent, speech patterns (slang, use of jargon), occupation, (mental) health status – or any other reasonable answer.	1 for each
Total	2

- (c) Citizens have a responsibility to actively engage with and contribute to their community. Give **two (2)** examples of how a young adult could do this. For each example explain **two (2)** benefits the contribution would provide to the community. (6 marks)

Description	Marks
Any reasonable answers – for example – Youth group leader – help educate younger children and keep them entertained/ off the streets/ as a role model Volunteer in aged-care facility – help to stimulate/ occupy residents/ free staff for other duties	1 mark for each example + 1 mark for each benefit (3 marks × 2)
Total	6

Section Three: Extended answer

30% (40 Marks)

Question 8

(20 marks)

There are four stages in Piaget's theory of cognitive development. These are: the Sensori-motor stage, the Pre-operational stage, the Concrete Operational stage and the Formal Operational stage. Discuss any **two (2)** of these stages in relation to the behaviours and development that might be seen in each stage.

In your answer you should:

- identify the age of the children that the stage applies to;
- describe the key features or characteristics of children's thinking about and understanding of the world at that stage; and
- illustrate your response with examples of behaviour that children might show at that stage.

Question 8 Guide to marking extended answers	Marks
First Piagetian Stage	8
An extended answer that correctly identifies the age range of the stage and gives a detailed correct description of the stage behaviours using examples.	6 to 8
An extended answer that correctly identifies the age range of the stage and gives some correct description of the stage behaviours.	3 to 5
Contains some generalisations and statements about the stage chosen or answer is a series of personal opinions or produces a brief response with or without making explicit reference to Piaget's theory.	1 to 2
No answer.	0
Second Piagetian Stage	8
An extended answer that correctly identifies the age range of the stage and gives a detailed correct description of the stage behaviours using examples.	6 to 8
An extended answer that correctly identifies the age range of the stage and gives some correct description of the stage behaviours.	3 to 5
Contains some generalisations and statements about the stage chosen or answer is a series of personal opinions or produces a brief response with or without making explicit reference to Piaget's theory.	1 to 2
No answer.	0
Communication skills	4
Well written and well-constructed response, consistently using the appropriate language of psychology and sound use of conventions	4
Well-constructed response using psychological terms	3
Well-developed response using everyday language	2
Simple response with little clarity	1
Response lacks clarity	0
TOTAL	20

Keywords, phrases or concepts for each stage include:

Sensori-motor: Birth to 2; reflexive; egocentric; simple ideas about cause and effect; interest in object for object's own sake; object permanence.

Preoperational: 2 to 7; developing thought processes; expanding vocabulary; egocentric; animism; symbolism; moral realism; pretend play.

Concrete operational: 7 to 11; rational thought processes; decline in animism and egocentrism; conservation; reversibility.

Formal operational: 11 to 15; abstract thought; hypothetic deductive reasoning; propositional thought.

Question 9

(20 marks)

According to the Australian Bureau of Statistics (2009), gambling activity in Australia increased dramatically during the 1990s. Discuss winning and losing, and the psychological impact on individuals in the community, in relation to gambling. Refer to relevant psychological evidence in your answer.

In your answer you should:

- describe the psychological impact of winning on individuals in the community
- describe the psychological impact of losing on individuals in the community
- refer to relevant psychological studies and/or theories related to winning and losing.

Question 9 Guide to marking extended answers	Marks
Winning	8
An extended answer with three or more accurate, detailed references to relevant psychological concepts, studies and/or theories and research that describes and explicitly explains winning.	6 to 8
An extended answer with minimal (one or two), brief and/or inaccurate descriptions of relevant psychological concepts, studies and/or theories and research.	3 to 5
Contains some generalisations and statements consistent with current psychological understandings or answer is a series of personal opinions or produces a short answer with or without making reference to empirical evidence.	1 to 2
No answer.	0
Losing	8
An extended answer with three or more accurate, detailed references to relevant psychological concepts, studies, and/or theories and research that describes and explicitly explains losing.	6 to 8
An extended answer with minimal (one or two), brief and/or inaccurate descriptions of relevant psychological concepts, studies, and/or theories and research.	3 to 5
Contains some generalisations and statements consistent with current psychological understandings or answer is a series of personal opinions or produces a short answer with or without making reference to empirical evidence.	1 to 2
No answer.	0
Communication skills	4
Well written and well-constructed response, consistently using the appropriate language of psychology and sound use of conventions	4
Well-constructed response using psychological terms	3
Well-developed response using everyday language	2
Simple response with little clarity	1
Response lacks clarity	0
TOTAL	20

Some keywords, concepts and theories include: self-esteem; fulfilment; gambler's conceit (they can stop when they want); gambler's fallacy (they have to win eventually); addiction; effects of near losses/wins, learning theory (such as maintaining behaviour when losing); cognitive theories; effects of media promotion; perceived economic benefits and challenges; social effects.