PSYCHOLOGY

Stage 2

WACE Examination 2011

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 (8 marks)

Researchers wanted to determine the effect of drinking caffeine on students' heart rates. The researchers collected 100 Year 12 student volunteers. Fifty students were randomly assigned to Group One and fifty were assigned to Group Two.

The following sequence of tasks was undertaken by each of the participants.
- Sit calmly in a quiet room for five minutes.
- Drink one cup of hot coffee (for Group One, no caffeine; for Group Two, caffeine).
- Have researcher measure heart rate.
- Return and repeat the procedure on two more consecutive days.

At the conclusion of the study, the following results were calculated.
Group One – no caffeine. Mean heart rate = 70 beats per minute
Group Two – caffeine. Mean heart rate = 85 beats per minute

(a) State the hypothesis the researchers would be testing in this study. (2 marks)

Description	Marks
Example of 1 mark: Caffeine will increase the heart rate of school students (or similar wording).	1–2
Example of 2 marks: Students who consume caffeine will have a higher mean heart rate than students who do not.	
	Total 2

(b) (i) Identify the independent variable. (1 mark)

Description	Marks
The consumption of caffeinated versus decaffeinated coffee No marks will be awarded for 'caffeine' alone.	1
	Total 1

(b) (ii) Identify the dependent variable. (1 mark)

Description	Marks
(Mean) heart rate/beats per minute	1
	Total 1

(c)   (i)   A statistical test on the difference between the mean scores for Group One and
Group Two found that it was 'statistically significant'. Explain what this finding
means. (2 marks)

Description	Marks
Example of 1 mark: $p < 0.05$ OR $p < 0.01$ OR $p < 0.001$ or 'not by chance alone'	1–2
Example of 2 marks: Probability or chance of difference between the control and experimental groups occurring due to chance is less than 5% or 1% or 0.1% / low (or similar wording).	
	Total 2

(c)   (ii)   Identify **one (1)** source of error in the design of this experiment and suggest a
way of reducing this error. (2 marks)

Description	Marks
Source of error: any *one* of small sample size; any extraneous variable (such as previous food/health history); students used to consuming caffeine; no baseline measurements taken before and after the five minutes; practice effects (might be less anxious about the procedure on day two). Or any logical and correct answer.	1
Way of reducing: must relate to source of error response. Any *one* of increase sample size; double-blind experiment; control extraneous variable; abstain from consuming caffeine for two days prior.	1
	Total 2

Question 2   **(7 marks)**

A sample of secondary school students completed a quantitative self-report measure to determine their attitudes toward wearing school uniforms. The age of participants and the mean of the group, indicating their level of support for wearing a school uniform, are shown in the table below. (Higher scores indicate a stronger level of support.)

AGE (years)	14	15	16	17
SCORE	8	12	18	20

(a)   State **one (1)** conclusion that could be drawn from this study.   (1 mark)

Description	Marks
Any one of: older students are more supportive of uniform; younger students are less supportive of uniform; 17 year olds most supportive of uniform; positive correlation or any logical, correct statement.	1
	Total 1

(b)   Describe, using an example, the difference between 'population' and 'sample' when conducting research.   (2 marks)

Description	Marks
Population is the entire/ large group being studied/of interest to the researcher. Sample is a small/ selection/representative of the larger group.	1
Any logical and correct example, for example, randomly select 50 subjects / sample from entire population of Year 12 students.	1
	Total 2

(c)   Identify **two (2)** ethical considerations relevant to this study. Explain how the researchers would deal with each of these considerations in their research.   (4 marks)

Description	Marks
Any two of confidentiality; informed consent; parental consent; voluntary participation; equitable treatment; nonmalificence; beneficence; privacy; honesty (1 mark each).	1–2
Two explanations of how each ethical consideration would be dealt with such as: Assign numbers rather than use names; ensure participants understand research and sign to indicate consent - they may withdraw at any time; obtain parental consent; treat all fairly and equally; do no harm - ethically approve research; do some benefit from research; do not share personal details or collect unnecessary personal information; do not deceive participants and explain process and results - or debrief afterwards. (1 mark each)	1–2
	Total 4

Question 3 **(5 marks**

A study was conducted with a group of Psychology students to determine the relationship between the number of hours spent studying Psychology per week and the final examination score. The results of this study are shown in the table below.
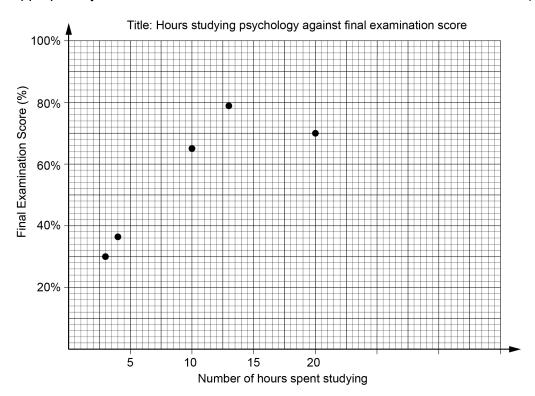
Student	Amount of study per week (hours)	Final examination score (%)
1	3	30
2	20	70
3	4	36
4	10	65
5	13	79

(a) State the median examination score from this group. (1 mark)

Description	Marks
65	1
	Total 1

(b) Plot a scattergram of these scores on the axes provided. Label the scattergram appropriately. (3 marks)

Title: Hours studying psychology against final examination score

Description	Marks
Labelled axes (x and y) with units of measure title of graph correctly plotted points (1 mark each)	1–3
	Total 3

(c) The hypothesis of this study is that there is a relationship between the number of hours spent studying each week and examination scores achieved. Do the results given support this hypothesis? (1 mark)

Description	Marks
Yes. The hypothesis is supported.	1
	Total 1

Section Two: Topic-related content 50% (50 Marks)

Question 4: Biological influences (10 marks)

(a) Define classical conditioning. (2 marks)

Description	Marks
Example of 1 mark: (Associative) Learning by pairing OR learning by association (or similar wording)	1–2
Example of 2 marks: Through previously unassociated stimuli.	
	Total 2

(b) Name **one (1)** theorist associated strongly with (3 marks)
    (i)   classical conditioning.
    (ii)   operant conditioning.
    (iii)   observational learning.

Description	Marks
Pavlov/Watson	1
Skinner/Thorndike	1
Bandura	1
	Total 3

(c) (i) Describe what is meant by the term 'behaviour modification'. (2 marks)

Description	Marks
A change in behaviour (increase or decrease).	1
Through conditioning/reinforcement/learning principles/punishment.	1
	Total 2

(ii) Give an example of the use of behaviour modification to change the behaviour of an individual. (3 marks)

Description	Marks
Describes change in behaviour. The outcome is an increase or decrease in target behaviour, depending on the example given.	1
Previous examples of stimulus such as: token economy; reward for good behaviour; sticker chart.	1
Identifies learning principle (such as reward/punishment/stimulus).	1
	Total 3

Question 5: Relational influences (12 marks)

(a) Explain briefly **two (2)** 'determinants of liking'. (4 marks)

Description	Marks
Any two of reinforcement; similarity/balance/affirmation; social exchange; proximity/propinquity; reciprocity (1 mark each)	1–2
Example could include, but are not limited to: Relevant explanation for each determinant named: Reinforcement – 'liked' person is associated with something positive. Similarity/Balance/Affirmation – 'liked' person is similar to us/mutual attraction. Social Exchange – cost/benefit to get reward from other person (less effort for more benefit). Desirability/attractiveness – we are more likely to find attractive people more 'likable'. Proximity/propinquity – easier to establish or maintain friendships through frequent contact. Reciprocity – mutual feelings are returned. (1 mark each)	1–2
	Total 4

(b) (i) Identify **two (2)** types of conflict resolution that might be used in real-world situations. (2 marks)

Description	Marks
Counselling, arbitration, mediation, negotiation, bargaining, assertive / active communication, (1 mark each to a maximum of 2 marks)	1–2
	Total 2

(b) (ii) Give **one (1)** example of how each of these **two (2)** types of conflict resolution can be used in improving real-world situations. (2 marks)

Description	Marks
Any two logical and correct responses that describe the example given, such as a therapist might help a married couple discuss their problems; the manager might discuss the issue with two workmates; a mediator might help neighbours agree on a fence (1 mark each)	1–2
	Total 2

(c)   Identify **two (2)** parenting styles. Give an example of how each style might influence the way in which a child develops.   (4 marks)

Description	Marks
Any two of authoritative, authoritarian, permissive, uninvolved (1 mark for each one named to a maximum of 2 marks).	1–2
Any two logical and correct responses for description of influence relative to named types, such as: **Authoritative:** better decision making, discussion, achievement oriented Authoritarian: less alternative viewpoints, compliance, obedience, emotional development stifled. **Permissive:** expresses self as one wishes, less boundaries, moral development stifled. **Uninvolved:** lacks bond with parent, more tantrums/aggression/delinquency (1 mark for each influence).	1–2
	Total 4

Question 6: Communication **(10 marks)**

(a)   Provide an example of how the language used in peer relationships can differ from the language used in the workplace.   (2 marks)

Description	Marks
Language with peers would be more casual/slang/informal/grammatically incorrect/more emotional/emotive/abbreviated. Language in the workplace would be more formal/proper/no slang/no swearing	1
Provides an appropriate example	1
	Total 2

(b)   (i)   Name **two (2)** obstacles to effective communication.   (2 marks)

Description	Marks
Naming two obstacles, such as: not listening effectively, not using assertive language, autism, specific language impairment, deafness, not understanding the language (1 mark each)	1–2
	Total 2

(b)   (ii)   Explain briefly each of the **two (2)** obstacles named in (i).   (2 marks)

Description	Marks
Explain why each is an obstacle with a logical and correct answer, such as: message is not received/understood as intended, message not articulated well, message not sent as intended (1 mark each)	1–2
	Total 2

(c)   Studies have shown that the way we use language (manner of speaking) is as important as what we say when communicating. Provide **two (2)** examples that show how slang, dialect or accent used in communication can influence relationships.   (4 marks)

Description	Marks
People who speak 'properly', i.e. without an accent and with no 'slang' words, are considered more intelligent, more influential, more authoritative, better educated, or more plausible. People who use slang/dialect/casual speech are considered lower class, less intelligent, or less educated. (1 mark each, to a maximum of 2 marks)	1–2
Provides an explicit influence on relationship, positive or negative (1 mark each, to a maximum of 2 marks). Any logical, correct example (1 mark for each example)	1–2
	Total 4

Question 7: Social psychology   (10 marks)

(a)   Define the following terms: (2 marks)

(i)   social facilitation

Description	Marks
Increase or boost performance when in the company of others.	1
	Total 1

(ii)   social inhibition

Description	Marks
Lessening of performance when in the company of others or Lessening of performance when performing complex tasks.	1
	Total 1

(b)   Explain, using an example, the process of 'group polarisation'.   (3 marks)

Description	Marks
Individuals in a group with others who hold similar attitudes or beliefs	1
Will have opinions strengthened.	1
Examples include KKK, terrorist groups, gangs, football crowds, or any other logical and correct answer.	1
	Total 3

(c)   Solomon Asch and others have demonstrated that the majority of people will conform to the behaviour of group members.

(i)   State **three (3)** reasons why people may conform.   (3 marks)

Description	Marks
Any three distinctively different examples, such as: • don't like standing out; • to be accepted in the group; • normative social influence; • taking cue from others in new situations; • informative social influences; • blend in; • doubt own judgement; or • any other logical and correct answer (1 mark each to a maximum of 3 marks)	1–3
	Total 3

(ii)   Give an example of how conformity is demonstrated in a real-life situation.
(2 marks)

Description	Marks
Dressing the same, hairstyles, voting, worshiping or any other logical and correct answer (1 mark for naming the example; 1 mark for describing why/how it is an influence)	1–2
	Total 2

Question 8: Culture   **(8 marks)**

(a)   Define the term 'attitude' as it is used in Psychology.   (2 marks)

Description	Marks
Beliefs (cognition) and feelings (emotions).	1
We hold about ourselves, other people, objects and issues.	1
	Total 2

(b)   Describe **one (1)** way in which attitudes can be measured. Identify **one (1)** advantage and **one (1)** limitation of using this method.   (3 marks)

Description	Marks
Ways: Likert scales, self-reporting scales, experimentation (e.g. priming), questionnaires, observation or any other logical and correct answer.	1
Advantage: any logical and correct answer.	1
Limitation: any logical and correct answer.	1
	Total 3

(c)   Explain, using an example, how people from different cultures can have different attitudes towards the same thing.   (3 marks)

Description	Marks
Attitudes to the aged (traditional societies keep aged at home and often revere and cherish them while western societies often put them in homes to be cared for by paid carers); traditional societies tend to keep generations together while western societies fragment them; Muslim communities view 'mental disability' as coming from God just as all things do while western societies view it as a disadvantage; individualistic versus collectivist cultures or any other logical and correct answer. (1 mark for example, 2 marks for explanation from two different cultures).	1–3
	Total 3

Section Three: Extended answer   **30% (40 Marks)**

Note: The following marking guide is generic and suitable for both questions in Section Three.

GUIDE TO MARKING RESPONSES	MARKS
Use of evidence to support points	/8
One (1 mark) or more (1 mark) examples of evidence from psychological theory and research that includes some detail are used to support statements (e.g., description of a psychological theory or research study/findings)	7–8
Statements supported by some rudimentary psychological evidence (e.g., the name of a theorist/researcher (1), name of a theory or example of a research study (1), but no detail	5–6
Statements supported by some personal anecdotal (e.g., personal experience) (1) or real life (e.g. information from the mass media) (1) evidence	3–4
Series of generalisations (1) or some statements (1) consistent with psychological understandings, but without any specific examples of supportive evidence (anecdotal, experiential, theoretical or empirical)	1–2
Response consists of vague generalisations that are not consistent with psychological understandings / are incorrect	0
Complexity of discussion/argument	/8
Sustained logical argument that demonstrates some understanding of how factors related to self (1), others (1) and society (1) influence the relevant behaviour.	6–8
A logical narrative showing psychological understanding of the topic (1) and some evidence of a sustained argument (1)	4–5
A simple narrative that shows basic psychological understandings of the topic (1) and ability to make an argument (1)	2–3
Discussion/argument suggests minimal understanding of the factors that influence the relevant behaviour.	1
Communication skills	/4
A well-written response with appropriate use of psychological terms	4
Some use of psychological terms. Adequately developed sentences and paragraphs	3
Uses clear everyday language with adequate spelling and grammar.	2
Poor written English expression skills significantly impair the comprehensibility of the response (e.g., very poor spelling and grammar, poor sentence and paragraph structure).	1
TOTAL	20

Questions 9 and 10 have been answered in dot point form to assist the markers with a list of key understandings that candidates could include in their answers. This list is not exhaustive.
Markers should be prepared to accept other appropriate answers and mark them on their merits.

Question 9   **(20 marks)**

Construct an argument, with supporting evidence, to explain how the factors of personality, interpersonal relationships and culture can influence a person's ability to deal with world events. In constructing your argument, you should:

- Give a clear explanation of 'world events'.
- Explain how personality can influence a person's ability to deal with world events.
- Explain how interpersonal relationships can influence a person's ability to deal with world events.
- Explain how culture can influence a person's ability to deal with world events.
- Finish with a conclusion.

Marks will be given for making references to evidence in your answer.

Description	Marks
Definition/explanation of <u>'world events'</u> for example, an event with a major impact (could be positive or negative) on a large number of people. Some world events can elevate levels of stress. Stress varies according to personal interpretation of event-how controllable, predictable and threatening the event is. Relevant examples: Japan quake, Olympics, GFC.	
<u>Personality:</u> define. For example, characteristic ways of thinking, feeling and acting that make a person an individual. Reference to at least one personality theory/type such as Big 5, Type A/B, Eysenck's dimensions. Relate aspect of personality to ability to deal with world event; e.g. Type B - easy going; could cope with change better. High on emotional stability; can withstand stress/ more confident. Introverted; less able to cope with excitement. Less anxiety or stress experienced if ideal self, self-image and behaviour all well matched. Kobasa – hardy personality type is more resilient. High levels of resilience allow for world event to be perceived as a challenge/opportunity.	1–20
<u>Relationships:</u> define. For example, different types of bonds that develop between individuals. Varies in context and intensity. Relationship with parents/family is an important agent of socialisation – prepares individual for functioning in society. For example parental relationships can provide emotional support. Close family bonds help with development of communication skills, Attachment supports self-reliance and better peer relationships (Stroufe). Relationship with peers or family may offer support, empathy, alternative views during stress of world event.	
<u>Culture:</u> Define. For example, shared rules/beliefs, behaviour, values and attitudes shared by group and passed from generation to generation. Can refer to collectivist vs individualist cultures in terms of sense of community/ family relationships/ acceptance of world event/ reliance on religion as explanation of the event and method of coping. Collectivist may rely on wisdom of family/ elders to support. Role of women may differ between cultures. Reliance on technology to support individual during the event will differ between cultures. (Fishbein and Ajzen) Theory of Reasoned Action – culture will influence action of individuals.	

Conclusion: Clear summary of main ideas – any two points	
Evidence: Any three cited researchers accurate and relevant. 1 mark per citation. See examples from notes above.	
One mark for each valid point.	
	Total 20

Question 10 (20 marks)

'Shopping centre security staff will be more effective if they wear a uniform.'

Evaluate the accuracy of this statement with reference to psychological understandings related to self, others and society.

In your response:
- Begin with a broad evaluation of the statement, including definitions of any terms that you consider are necessary.
- Include information related to self, others and society.
- Finish with your conclusion.

Description	Marks
Defining 'effective' role of security staff • Helpful to those in need – lost children/elderly • Control rowdy, abusive, 'undesirable elements' – issue move on orders • Assist in apprehension of shoplifters and other lawbreakers • Assist in evacuations in emergencies	
Evaluation impact of uniform: Need to be highly visible and identifiable – recognisable to the young and old alike Uniform must be recognisable as such – like a police uniform – transit guard etc. Socialisation to recognise, if not respect, authority Status attached to uniform – social categorisation – stereotype Status confers power – coercive power and legitimate power (Raven (1965) – conformity – Milgram (1974)	1–20
Self: Stereotypes/attitudes; moral development; age of a person will determine their compliance; social learning theory.	
Others: Conformity/obedience; Milgram; authority in communication; assertive; status and power, communication, perceived authority.	
Society: Conflict resolution; civic responsibility	
Conclusion: Clear summary of main ideas. (1 mark each to a maximum of 2 marks)	
	Total 20

End of questions