

**Joseph Banks  
Secondary College**

**Research Methods Developmental and Personality   
Worth 5% of the school mark**

**Question/Answer Booklet**

**PSYCHOLOGY MARKING KEY**

**Units 1 and 2**

Student name : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Time allowed for this paper

## Reading time before commencing work: Two minutes

Working time for the paper: **sixty-two minutes**

# Materials required/recommended for this paper

***To be provided by the supervisor:***

This Question/Answer Booklet

Formulae and Data Booklet

***To be provided by the candidate:***

Standard items: pens (blue/black preferred), pencils (including coloured), sharpener,

correction tape/fluid, eraser, ruler, highlighters.

Special items: non-programmable calculators approved for use in the WACE examinations

# Important note to candidates

No other items may be taken into the examination room. It is **your** responsibility to ensure that you do not have any unauthorised notes or other items of a non-personal nature in the examination room. If you have any unauthorised material with you, hand it to the supervisor **before** reading any furthe

**Structure of this paper**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Section | Number of questions available | Suggested working time  (minutes) | Your Mark | Marks available | Percentage of test |
| Section One:  Research Methods | 2 | 24 |  | 26 | 40 |
| Section Two:  Short Answer | 2 | 18 |  | 19 | 30 |
| Section Three:  Extended Answer | 1 | 18 |  | 19 | 30 |
|  |  | **Total** |  | 64 | 100 |

**Instructions to candidates**

1. The rules for the conduct of Western Australian external examinations are detailed in the *Year 11 Information Handbook 2016*. Sitting this examination implies that you agree to abide by these rules.
2. Write your answers in this Question/Answer Booklet.
3. When calculating numerical answers, show your working or reasoning clearly. Your working should be in sufficient detail to allow your answers to be checked readily and for marks to be awarded for reasoning.

In calculations, give final answers to one significant figures and include appropriate units where applicable.

1. You must be careful to confine your responses to the specific questions asked and to follow any instructions that are specific to a particular question.
2. Supplementary pages for the use of planning/continuing your answer to a question may have been provided at the end of this Question/Answer booklet. If you use these pages to continue an answer, indicate at the original answer where the answer is continued, i.e. give the page number.

**Section One – Research Methods (26 marks)**

**Question One (7 marks)**

Researchers wanted to investigate the ongoing health effects of working as a medical student at a busy city hospital. Participants were first year medical students chosen from a hospital close to the university where the researchers worked. They were followed throughout their medical training. Researchers met participants once a year over an eight-year period.

1. Name the study design used by researchers. Circle the correct answer below. (1 mark)

**Longitudinal / Cross-sectional**

1. State **one** advantage of using this type of study design.   (1 mark)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| Reduces the effect of participant related extraneous variables  Easier to see cause and effect due to reduced extraneous variables |  |

1. State **one** disadvantage of using this type of study design. (1 mark)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| If one participant withdraws their data – the researchers lose a lot of data  Time consuming |  |

1. Provide ONE example of quantitative data and ONE example of qualitative data that psychologists could use to assess the health effects of working as a medical student. State whether each example is *objective* or *subjective.* (4 marks)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| Quantitative subjective – likert scales, closed questions  Qualitative subjective – interviews or open-ended questions in survery  Quantitative objective – measures of heart rate, reaction time, galvanic skin respose etc  Qualitative objective – brain scans |  |

**Question Two (19 marks)**

Ethnic identity development may increase resilience to discrimination and prejudice, which are often common and stressful for ethnic minority adolescents. Based on ethnic identity development and resilience theory, it is expected that if an individual faces higher levels of discrimination-based stress, then ethnic identity strength would have a positive protective effect on the individual’s self-esteem. The researchers wanted to investigate this these variables in adolescents ages (15-18), initially using a correlation research design. The initial exploratory results can be shown below.

*Table 1: Strength of resilience to discrimination and prejudice vs ethnic identify strength*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Participant | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Ethnic identity strength | 5 | 2 | 7 | 6 | 1 | 4 | 2 |
| Strength of resilience | 6 | 3 | 7 | 8 | 3 | 2 | 1 |

1. Plot a graph of the above results. (5 marks)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| Graph is in the form of a scatterplot  Scale is appropriate  Labelled axis, keys  Units’ area included  Title includes both variables |  |

1. Describe **one** finding from the above graph. (1 mark)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| The findings showed a moderate positive correlation between resilience and strength of ethnic identity |  |

The researchers then wanted to create a quasi-experiment on from the above non-experimental data.

1. From the above research extract identify the aim. (1 mark)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| The aim of the research was to identify the relationship between strength of ethnic identity and resilience |  |

1. Write an operationalised hypothesis for this study. (4 marks)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| Includes:  Participants demographic mentioned  Operationalised IV and DV  Compared to a control  .  *e.g. It is hypothesised that participants ages 15-18 who have a strong ethnic identity of over 7 out of 10 will show higher levels of resilience compared to those with low resilience as measured by how long they continue with aa complex and frustrating task.* | 1  2  1 |

1. Create and outline a potential method to test the above variables out experimentally.

(5 marks)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| Needs to:  identify how they will gather the participants – sample method  has a way of gathering a baseline measure of the participants strength of ethnic identity and resilience before putting them into the groups of high or low ethnic identity strength  suggest a way of measuring resilience that is valid  e.g. Sampled through volunteer sampling to select participants in the correct age range  Participants were then sent a survey that measured their ethnic identity strength, resilience and other personality / life circumstances characteristics that may impact resilience. Researchers ruled out participants who had undergone any chronic stressful events / traumatic events as this would be an extraneous variable, participants were selected for the high strength of ethnic identity if they scored at least a 7 out of 10 and low strength of ethnic identity if they scored a 3 of below.  Participants were then given a public speaking task where they were to come up with a speech then present to a panel. The panel are all actors who were asked to harshly critic and look unimpressed. Resilience is measured through their ability to continue through the harsh critics, numerous interruptions and a number of other planned inconveniences during their performance. | 1  2  2 |

1. The researchers found that the results of their quasi-experiment had similar results as their correlation study, achieving a p value of p < 0.05. State the conclusions that the researchers can draw from this. (3 marks)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| Any three of the following:  The probability that the results are due to chance is less than 5%.  The hypothesis can be supported and the results are statistically significant.  With at least 95% certainty the results are due to the independent variable being manipulated or that strength ethnic identity impacts resilience |  |

**Section Two – Development and Personality**

**Question One (12 marks)**

It’s the end of Ramadan and the Abbas family have come together to celebrate the festival of fast-breaking, Eid al-fitr. Maryam and Daleel are in their mid-30’s are now proud parents of two children, 4-month old Abdul and toddler Rida who is 4 years old. The Abbas family all gather at the house for the festival, including Sana, Daleel’s mother who is a doting grandmother at 76, and Kareem, Daleel’s younger brother. Kareem has just finished high school and is unsure of what he wants to do with his life, so Sana has been encouraging Daleel to give him advice and spend more time with him. Meanwhile, Kareem is playing with Abdul and tricks him by hiding his toys then making them appear which Abdul does not enjoy, so Maryam steps in and gives Abdul a big hug which cheers him up immediately.

1. Provide a description of Erikson’s developmental theory (3 marks)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| Any of the following 3:  Erikson developed a theory of identity that showed how identity changed over a lifetime  The theory is a stage theory which consists of 8 stages  Each stage has a psychosocial crisis that helps to shape identity for the better of for the worse | 1  1  1 |

1. Identify the stage and explain the crisis that each of the family members below are going through (4 marks)

|  |  |
| --- | --- |
| **Daleel** | Either intimacy v isolation or generativity v stagnation  Intimacy v isolation – Daleels to have a lot of love and connection surrounding him therefore has the ability to share experiences with others and care for them  Generativity v stagnation  Daleel is thinking about how he can give to the next generation. He has done so through starting a family and is nurturing them |
| **Sana** | Integrity v despair  Sana reflecting on her life and is able to either say she is happy with the life decisions that she has made OR that she is living with the guilt of wrong decisions/regrets and develops a fear of death |

Abdul and Rida are in vastly different stages of cognitive development. Piaget theorises that there are 4 stages of cognitive development.

1. Identify and describe the cognitive stage that Rida is in. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Preoperational stage | 1 |
| Increase in children’s use of the **symbolic** function (e.g. language and symbolic play) and an **inability to understand other’s point of view/egocentrism.** | 1 |

Rida was reaching for a kebab when she noticed a picture of a crescent moon on the bowl. She picked up the bowl and asked Sana if the picture was representing a moon, Sana nodded.

1. According to Piaget’s theory of cognitive development, identify and explain the mental process Rida was undergoing to identify the moon. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Assimilation | 1 |
| Process of taking new information (a picture of the moon) or a new experience and fitting  it into an already existing schema (the shape/appearance of the moon) | 1-2 |

**Question Two** **(7 Marks)**

1. Compare Freud’s psychosexual stages of development and Erikson’s psychosocial stages of development. (4 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Similarities – must outline 2 similarities for 2 marks.  Examples:   * Both are stage theories of development * Both believe that to have a healthy personality, one must successfully overcome each stage. | 1-2 |
| Differences - must outline 2 differences for 2 marks.  Examples:   * Erikson believed that development occurred over the lifespan, whereas Freud believed that personality becomes fixed after childhood. * Erikson was concerned with the social development of people in their context, Freud was concerned with the sexual development in relation to the Id, Ego and Superego. | 1-2 |

1. Use the table below to answer questions regarding the heritability of traits using twin studies.

*Table 2: Concordance rates of a given trait in Monozygotic and Dizygotic twins*

|  |  |  |
| --- | --- | --- |
| Trait | Monozygotic Twins | Dizygotic Twins |
| IQ | 74 | 58 |
| Anxiety Disorder | 45 | 25 |
| Major Depression | 54 | 20 |

1. Define the term concordance. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| The rate of agreement or similarity | 1-= |
|  |  |

1. According to Table 2, which trait has a largest genetic component? Use information in the table to justify your answer. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| IQ | 1 |
| IQ has the highest rate of concordance between MZ twins OR there is a significant difference between MZ (74) and DZ (58) on the IQ trait. | 1 |

**Extended Answer Section**

**Question One (19 marks)**

Amelia is a young woman who works at a café in the city, she is good at her job because she is lively and talkative to customers. She often dreams about travelling, saving all her money to go to a new place each year. While waiting for her holidays, she often feels restless and excitable. However, if there are any delays to her flight or turbulence, she becomes touchy and aggressive towards flight staff. One day Amelia found out her that she had an identical twin sister, they were both very nervous to meet each other, but ended up talking for hours about their fun experiences travelling and meeting lots of new people.

* Use Eysenck’s trait theory of personality to explain one trait of Amelia’s behaviour

(3 marks)

* How would a trait theorist explain the similarities between the two twins? (2 marks)
* Evaluate the use of twin studies in explaining behaviour. (5 marks)
* Describe the similarities and differences of adoption and twin studies (4 marks)
* Refer to psychological evidence. (5 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| *Use Eysenck’s trait theory of personality to explain one trait of Amelia’s behaviour.*  Identify (1), define (1) apply (1)  **Identify:** Extroverted OR Neurotic  **Define**: Tendency to be sociable, active and willing to take risks OR a tendency to be emotional unstable.  **Apply**: Amelia is talkative to customers/dreams about travelling and meeting lots of people OR becomes touchy and aggressive towards flight staff/very nervous to meet her sister. | 1-3 |
| *How would a trait theorist explain the similarities between the two twins?*  A trait theorist believes personality is genetically based, (1) therefore the twins exhibit similar personality traits due to their identical genes (1) | 1-2 |
| *Evaluate the use of twin studies in explaining behaviour.*  Outlines two strengths (2)  Outlines two weaknesses (2)  Makes a conclusive statement about explaining behaviour (1)  Example:  **Strengths:** *Twin studies are useful in examining the extent that nature and nurture influence people’s behaviours (1) as they are able to see the similarities in behaviours between twins with the same or similar genes (1).* **Weaknesses:** *However, these studies do not perfectly isolate nature and nurture, as MZ twins grow up in very similar environments (1), whereas DZ twins may experience more differences in environment due to attractiveness, sex or temperament (1).*  **Evaluate***: Therefore, twin studies are useful in explaining some behaviours that are genetically driven, however, is not as useful at explaining highly environmentally influenced behaviours (1).* | 1-5 |
| Describe the similarities and differences of adoption and twin studies  Must outline 2 similarities (1 mark each) Must outline 2 differences (1 mark each)  **Similarities example:**  Both attempt to assess the nature and nurture debate by comparing people who share genetic material (MZ twins and biological parents) with those share less genetic material (DZ twins and adoptive parents) (1)  Both are non-experimental research – do not manipulate IV. Usually look at correlations/concordance rates of traits (1).  **Differences example:**  Twin studies are better at studying nature because MZ share 100% of the same genes (biological parents only share 50% of the same genes) (1).  Adoption studies are better at studying nurture/environment as twins likely share a lot of environmental factors (1) | 1-4 |
| **Refer to psychological evidence**  Statements are supported with description of relevant evidence using three or more sentences (e.g. theories, experiments, examples from  studies/research/real life).  Statements supported with some description of relevant evidence (e.g. theories, experiments, examples from studies/research/real life).  Statements supported with reference to relevant evidence (e.g. name of experiment or study). | 1-3  3  2  1 |
| **Quality of response**  Well-structured with consistent use of appropriate psychological language and correct spelling, punctuation and grammar. | 1-2 |