



Western Australian Certificate of Education ATAR course examination, 2016

Question/Answer booklet

PSYCHOLOGY

Please place your student identification label in this box

Student number: In figures

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In words

Time allowed for this paper

Reading time before commencing work: ten minutes
Working time: three hours

Materials required/recommended for this paper

To be provided by the supervisor

This Question/Answer booklet

Number of additional
answer booklets used
(if applicable):

To be provided by the candidate

Standard items: pens (blue/black preferred), pencils (including coloured), sharpener,
correction fluid/tape, eraser, ruler, highlighters

Special items: non-programmable calculators approved for use in this examination

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 material. If you have any unauthorised material with you, hand it to the supervisor **before** reading any further.

Structure of this paper

Section	Number of questions available	Number of questions to be answered	Suggested working time (minutes)	Marks available	Percentage of examination
Section One Research methods	3	3	30	30	20
Section Two Short answer	7	7	90	105	55
Section Three Extended answer	2	2	60	56	25
Total					100

Instructions to candidates

1. The rules for the conduct of the Western Australian Certificate of Education ATAR course external examinations are detailed in the *Year 12 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. You must be careful to confine your answers to the specific questions asked and to follow any instructions that are specific to a particular question.
4. Additional working space pages at the end of this Question/Answer booklet are for planning or continuing an answer. If you use these pages, indicate at the original answer, the page number it is planned/continued on and write the question number being planned/continued on the additional working space page.

Section One: Research methods**20% (30 Marks)**

This section has **three (3)** questions. Answer **all** questions. Write your answers in the spaces provided.

Additional working space pages at the end of this Question/Answer booklet are for planning or continuing an answer. If you use these pages, indicate at the original answer, the page number it is planned/continued on and write the question number being planned/continued on the additional working space page.

Suggested working time: 30 minutes.

Question 1**(10 marks)**

Two teachers measured the height of the children in their classes. The mean height of children in Class A was 132.8 cm and the mean height of children in Class B was 134.6 cm.

- (a) (i) Name **one** measure that could be used to show the dispersion (spread) of heights in each class. (1 mark)

- (ii) The distribution of height followed a normal curve. State **two** features of a normal curve. (2 marks)

One: _____

Two: _____

A statistical test on the difference between the two means showed $p > .05$.

- (iii) Outline the conclusion that should be drawn from this result. (1 mark)

Question 1 (continued)

Researchers were interested in the relationship between exercise and life satisfaction. Data from six participants are shown in the table below.

Participant	Hours of exercise per week	Life satisfaction score
1	2.0	14
2	2.5	16
3	1.5	12
4	5.0	18
5	3.5	17
6	1.0	11

- (b) (i) Produce a scatter plot of the data on the grid below. (4 marks)

A spare grid is provided at the end of this Question/Answer booklet.
If you need to use it, cross out this attempt.

Correlation between hours of exercise per week and life satisfaction scores											

- (ii) Outline what the results indicate about the association between exercise and life satisfaction. (2 marks)

Question 2

(8 marks)

Researchers wanted to investigate whether listening to music while studying affects memory in adolescents. All Year 12 students at Grand High School agreed to participate in the research. The boys and girls were divided into separate groups. Both groups were given 10 minutes to study a list of words. The girls listened to music whilst studying and the boys did not. The girls were then given a page of words and had to identify those that they had studied. The boys were given five minutes to write down as many of the words as they could remember.

- (a) Identify whether the participants were a sample or a population and provide **one** reason for your response. (2 marks)

- (b) Identify whether this research was experimental or non-experimental and provide **one** reason for your response. (2 marks)

- (c) Complete the table to identify **two** sources of error in the data and state **one** way of reducing each. (4 marks)

Source of error	Way of reducing error

Question 3**(12 marks)**

- (a) (i) State **one** way in which researchers can maintain participants' rights to anonymity. (1 mark)

- (ii) State **two** ways in which researchers can maintain participants' rights to confidentiality. (2 marks)

One: _____

Two: _____

Researchers wanted to study children's emotional development. They recruited a sample of two-year-old children and planned to test them every two years until the age of 12.

- (b) Name the type of study design referred to in this statement. (1 mark)

- (c) Name and describe an alternative study design that the researchers could use. (3 marks)

- (d) Outline **one** advantage of the study design named in part (b). (2 marks)

Question 3 (continued)

Researchers wanted to study how adolescents respond to stressful situations. Participants were told that they would be required to give a two-minute speech to an audience and then their levels of stress would be measured.

- (e) (i) Name **one** example of an objective quantitative measure that the researchers could use. (1 mark)

- (ii) Name **one** example of a subjective quantitative measure that the researchers could use. (1 mark)

- (iii) State **one** reason why an objective quantitative measure might produce data that are more valid than a subjective quantitative measure in this study. (1 mark)

End of Section One

See next page

Section Two: Short answer**55% (105 Marks)**

This section has **seven (7)** questions. Answer **all** questions. Write your answers in the spaces provided.

Additional working space pages at the end of this Question/Answer booklet are for planning or continuing an answer. If you use these pages, indicate at the original answer, the page number it is planned/continued on and write the question number being planned/continued on the additional working space page.

Suggested working time: 90 minutes.

Question 4**(15 marks)**

(a) Name the parts of the human nervous system shown by A and B in Figure 1. (2 marks)

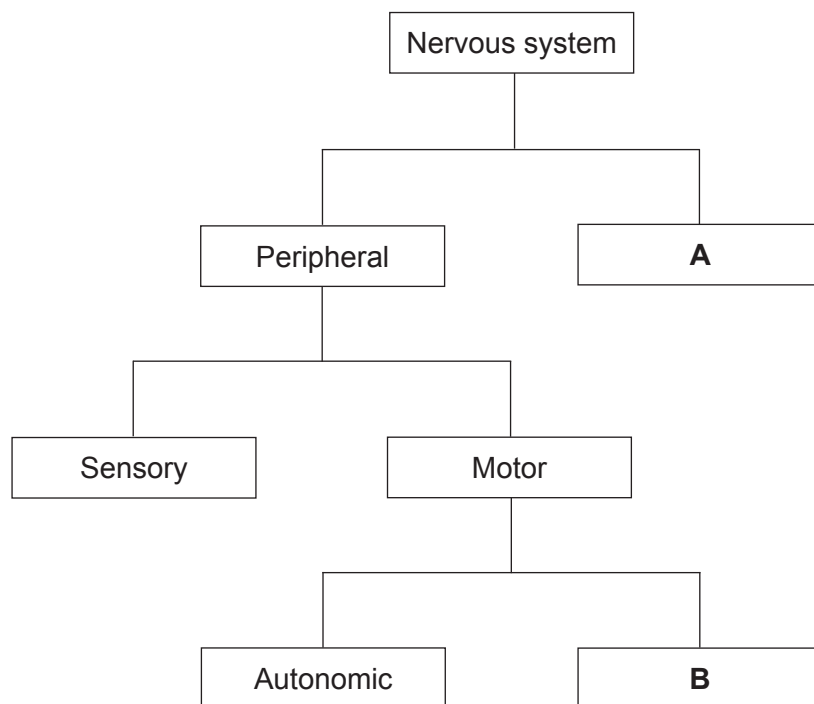


Figure 1. Human nervous system

A: _____

B: _____

Question 4 (continued)

(b) Name **two** examples of physiological responses and identify the part of the autonomic nervous system responsible for these responses in the following situations.

(i) Meditating in a quiet location. (3 marks)

Physiological response one: _____

Physiological response two: _____

Part of autonomic nervous system: _____

(ii) Discovering a large spider crawling in your hair. (3 marks)

Physiological response one: _____

Physiological response two: _____

Part of autonomic nervous system: _____

(c) List **two** functions for which the left hemisphere of the brain is responsible. (2 marks)

One: _____

Two: _____

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Figure 2. Diagram of a synapse

- (d) (i) Name the structures shown at A and C in Figure 2. (2 marks)

A: _____

C: _____

- (ii) State what occurs at A, B and C in the process of neural transmission. (3 marks)

A: _____

B: _____

C: _____

Question 5

(16 marks)

- (a) Mrs Jackson gives her students a stamp every time they are well behaved. Once 20 stamps are collected, students may choose a reward from the prize box. Name the technique used for modifying the students' behaviour. (1 mark)

Monica's cat comes running into the house as soon as Monica opens the refrigerator to prepare its food.

- (b) (i) Name the type of learning that this involves. (1 mark)

- (ii) State **two** reasons for your answer to part (b)(i). (2 marks)

One: _____

Two: _____

- (c) Define these terms in relation to learning theory.

- (i) reinforcement (1 mark)

- (ii) punishment (1 mark)

- (d) Andrew wants his son Jimmy to clean up his room. Give **one** example of how he might achieve this using

- (i) positive reinforcement. (1 mark)

- (ii) negative reinforcement. (1 mark)

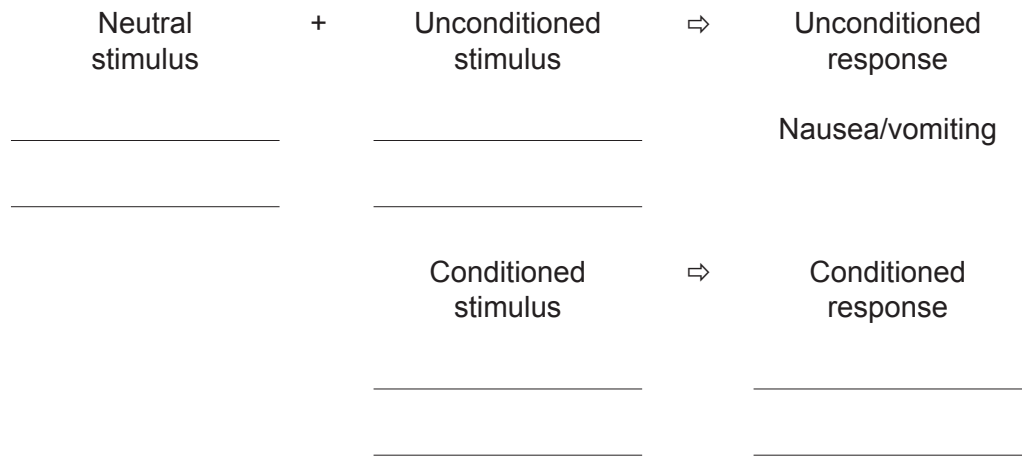
(e) Andrew also wants Jimmy to stop swearing. Give **one** example of how he might achieve this using

(i) positive reinforcement. (1 mark)

(ii) negative reinforcement. (1 mark)

Violet experienced severe nausea and vomiting from eating contaminated food from a market. The market was decorated with coloured lanterns. Violet now feels sick every time she sees coloured lanterns.

(f) (i) The process of learning in Violet's experience is shown below. The unconditioned response is nausea/vomiting. Identify the remaining variables. (4 marks)



In Pavlov's original experiments, the conditioned response was produced after multiple pairings of the neutral stimulus and unconditioned stimulus. However, Violet learned the association with a single pairing.

(ii) Outline what learning theorists believe about why some associations are learned very quickly. (2 marks)

Question 6

(16 marks)

- (a) Name **three** traits from McCrae and Costa's personality theory. For each, list **one** characteristic that a person who is high in that trait might have. (6 marks)

Trait one: _____

Characteristic: _____

Trait two: _____

Characteristic: _____

Trait three: _____

Characteristic: _____

- (b) (i) Outline Mischel's criticism of trait theories of personality. (2 marks)

- (ii) Explain the 'cognitive' part of Mischel's social cognitive theory of personality. (2 marks)

- (c) The school principal requested a Year 12 student to present a talk to Year 7 students on study tips for high school. Raphael volunteered to do the talk. Describe how each of the following theories of personality would explain why Raphael volunteered.

(i) trait theory (2 marks)

(ii) Rogers' humanistic theory (2 marks)

(iii) Bandura's social cognitive theory (2 marks)

Question 7

(15 marks)

- (a) Outline **one** similarity and **two** differences between authoritative and authoritarian parenting styles. (5 marks)

	Authoritative and authoritarian parenting styles
Similarity	
Difference	
Difference	

- (b) Permissive parenting style is one of many factors believed to contribute to antisocial behaviour in adolescents. Describe the features of permissive parenting and explain why this style might lead to antisocial behaviour. (3 marks)

- (c) (i) Describe the method used by Harlow in his research on rhesus monkeys. (3 marks)

- (ii) Describe the main findings of this research and outline Harlow's conclusions about attachment. (4 marks)

Question 8

(14 marks)

(a) Define 'social facilitation' and provide **one** example of this.

(2 marks)

(b) A museum hired new security guards to stop people from touching the displays. On training day the guards were told how to get people to obey their orders. Describe **two** factors that might have been discussed and refer to research by Milgram to support your response. (6 marks)

One: _____

Two: _____

- (c) Lola is shopping with three friends. Her friends suggest that they steal something. Describe **two** factors that might influence whether Lola conforms to the group and refer to research by Asch to support your response. (6 marks)

One: _____

Two: _____

Question 9

(15 marks)

A husband and wife are talking to each other after a day at work.

Wife: I feel so stressed because I am worried that I am not going to get that report finished this week.

Husband: You should delegate some of the work to your team members. When my team had a big report to do, we all contributed and finished it the day before the deadline.

Wife: There's so much to do and I feel so overwhelmed. The rest of the team doesn't have the background knowledge about the project like I do.

Husband: Well, you could ask your boss for an extension until next week.

(a) (i) Name the communication style shown by the wife according to Tannen's theory, and describe this communication style, using an example from the scenario.

(3 marks)

(ii) According to Tannen's theory, identify how the wife might be feeling at the end of this conversation and provide a reason for your response.

(2 marks)

(iii) According to Tannen's theory, identify how the husband might be feeling at the end of this conversation and provide a reason for your response.

(2 marks)

- (b) (i) Name and outline the key component of Chomsky’s theory of language development. (2 marks)

- (ii) Outline Bruner’s theory of language development and identify how it addressed the major limitation of Chomsky’s theory. (3 marks)

- (c) Compare and contrast Bernstein’s ‘restricted code’ and Labov’s ‘Black English Vernacular’. (3 marks)

Question 10

(14 marks)

(a) (i) Define 'resilience'.

(1 mark)

(ii) State **two** characteristics that researchers have found in people who are resilient. (2 marks)

One: _____

Two: _____

Members of the Free Wheelers cycling club all wear the club T-shirt and meet at the same café every Saturday morning. As well as cycling together, club members often arrange social outings and participate in fundraising for charity. All club members are able to contribute to decisions about social activities and the charities the club will support.

(b) Name and outline **two** factors that contribute to a sense of community according to McMillan and Chavis. Illustrate each factor with an example from the scenario. (6 marks)

One: _____

Two: _____

Asher was working at a convenience store when a man came into the store, threatened him with a weapon, and demanded money.

- (c) (i) Identify **two** characteristics of this experience that could contribute to Asher having a negative response to the event. (2 marks)

One: _____

Two: _____

- (ii) List **three** symptoms of post-traumatic stress disorder that Asher might experience after this event. (3 marks)

One: _____

Two: _____

Three: _____

End of Section Two

See next page

Section Three: Extended answer**25% (56 Marks)**

This section contains **two (2)** questions. You must answer **both** questions.

Additional working space pages at the end of this Question/Answer booklet are for planning or continuing an answer. If you use these pages, indicate at the original answer, the page number it is planned/continued on and write the question number being planned/continued on the additional working space page.

Suggested working time: 60 minutes.

Question 11**(28 marks)**

Marcus and Mary are 15-year-old twins. They are both kind and considerate, achieve very high academic results, and are talented musicians. Their father works as a music teacher and is a very extroverted person. Their mother is introverted and is a medical doctor who finds her work helping sick people very rewarding. Marcus is very confident and outgoing, plays the drums, and plans to start a band, like his older brother who is a professional musician and travels the world. Mary is quiet and shy, plays the violin and is a member of the school orchestra. She is not sure whether she would like to pursue a career as a musician, or study medicine.

Explain the similarities and differences in Marcus and Mary's characteristics and behaviours with reference to

- heredity
- Erikson's stage theory of identity
- Bandura's Social Learning Theory.

Refer to examples of psychological evidence to support your points.

Question 12**(28 marks)**

Ms Kelly teaches a children's dance class. When teaching a new routine, Ms Kelly first demonstrates each of the steps one at a time while the children watch her, she then gets the children to copy her, and calls out the steps as the children put them together in sequence until they have learned the whole routine.

Explain, referring to theories and concepts of memory, **three** ways in which Ms Kelly's teaching strategy assists the children to remember the dance routine.

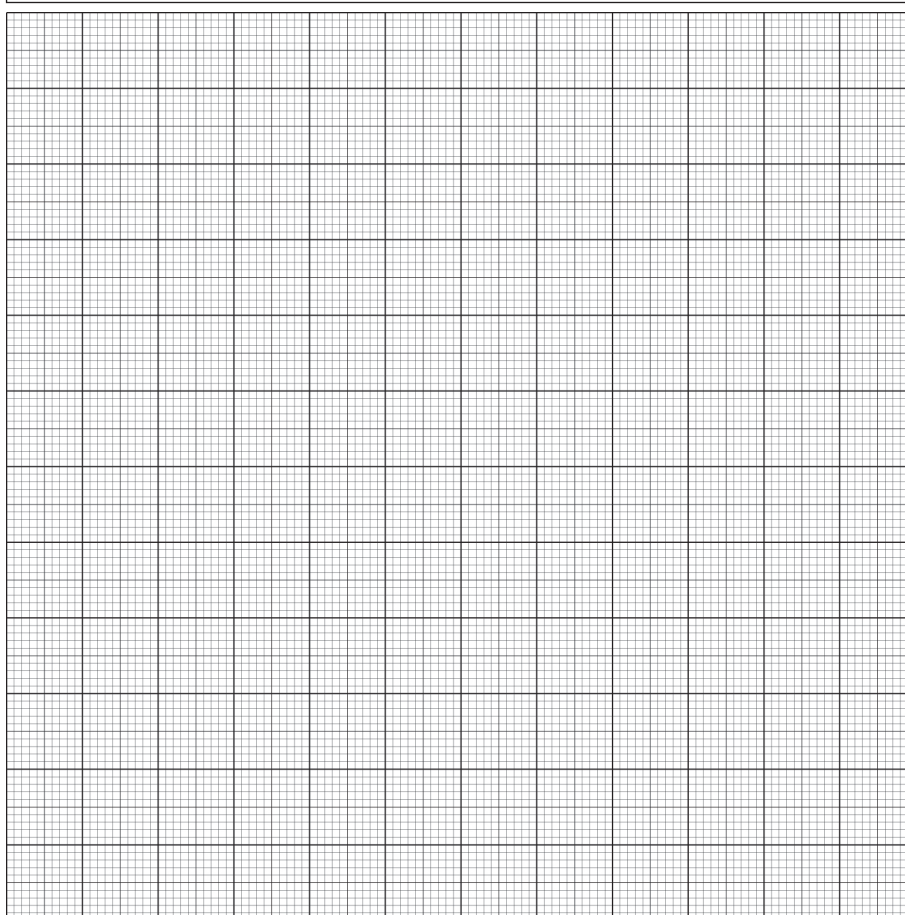
At dance class the following week, Ms Kelly asks the students to tell her the steps they learned the previous week. None of the children can remember how the dance routine started.

Explain, referring to theories and concepts of forgetting, **three** reasons for this.

End of questions

Question 1(b)(i)

Correlation between hours of exercise per week and life satisfaction scores
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ACKNOWLEDGEMENTS

Question 4

Figure 2

Adapted from: *2.85 Nerve cells and synapses: A* understanding for iGCSE Biology* [5th diagram]. (n.d.). Retrieved June, 2016, from <https://pmgbiology.com/2015/02/18/nerve-cells-and-synapses-a-understanding-for-igcse-biology/>

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