**Narrogin Senior High School**

Year 11 Psychology

Semester 1, 2021

Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Teacher: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Time allowed for this paper**

Reading time before commencing work: 10 minutes

Working time: 3 Hours

**Materials required/recommended for this paper**

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

This Question/ Answer booklet

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

Standard items: pens (blue/black preferred), pencils (including coloured), sharpener, eraser, correction fluid/tape, ruler, and 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 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 | 6 | 6 | 90 | 93 | 55 |
| Section Three  Extended Answer | 2 | 2 | 60 | 52 | 25 |
|  |  |  | Total |  | 100 |

# Instructions to candidates

1. The rules for the conduct of Western Australian external examinations are detailed in the *Year 11 Information Handbook 2021.* Sitting this examination implies that you agree to abide by these rules.
2. Write your answers in this Question/Answer Booklet preferably using a blue/black pen. Do not use erasable or gel pens.
3. Answer the questions according to the following instructions.

Sections One and Two: Write your answers in this Question/Answer booklet. Wherever possible, confine your answer to the line spaces provided.

Section Three: Consists of two questions. You must answer both questions.

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.

1. Supplementary pages for planning/continuing your answer to a question are 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 20% (30 marks)

This section has three questions. Answer all questions. Write your answers in the spaces provided.

Supplementary pages for planning/continuing your answers to questions are 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.

Suggested working time: 30 minutes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Question 1 (11 marks)

Forty participants were tasked with learning a list of 20 words while listening to music. An hour later, the participants were randomly allocated into two equal size groups and their recall ability was assessed when they were asked to recall the list of words. Group one completed their recall while listening to the same music played at the beginning of the study, while Group two recalled the words in silence. The table below shows the results collected.

|  |  |  |
| --- | --- | --- |
|  | **Group one** | **Group two** |
| Mean | 16 | 10 |
| Range | 8 | 12 |

(a) Comment on the spread of scores for each of the two groups. (1 mark)

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(b) Write a suitable operationalised hypothesis for this study. (4 marks)

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Question 1 (continued)

(c) Outline two benefits of randomly allocating participants into each group. (2 marks)

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(d) There were two groups, one for each condition of the independent variable. Explain two reasons why this is an advantage of the study, rather than having all participants exposed to both conditions (having to recall the words while listening to music and then again without music). (4 marks)

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Question 2 (11 marks)

A personal trainer wanted to investigate whether the tempo of music listened to while walking affected the speed at which people walk. She predicted that the faster the tempo of music listened to, the faster the person would walk. The personal trainer used beats per minute (bpm) as a measure of music tempo and recorded the distance (km) that 20 seventeen-year-old students walked for one hour on a treadmill. Five students were allocated into four different conditions, their results shown in the table below.

|  |  |
| --- | --- |
| Condition | Average distance walked (km) |
| Condition one: walking without listening to music | 3 |
| Condition two: walking listening to music at 40-70 bpm | 2.5 |
| Condition three: walking listening to music at 85-110 bpm | 4 |
| Condition four: walking listening to music at 120-140 bpm | 5.5 |

(a) Graph the results from the above information into the grid below. (5 marks)



Question 2 (continued)

(b) Outline two ways that the reliability of the experiment could be increased.

(2 marks)

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(c) Identify two ethical considerations related to this experiment and explain why the personal trainer should take them into consideration. (4 marks)

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Question 3 (8 marks)

Miss Kicisnski had her small group of students sit a 20-mark test after no revision and then another test after allowing them two hours of revision. Their test results are shown in the table below.

|  |  |  |
| --- | --- | --- |
| Participant | Score on test without revision | Score on test after 2 hours of revision |
| 1 | 11 | 15 |
| 2 | 6 | 17 |
| 3 | 8 | 20 |
| 4 | 10 | 14 |
| 5 | 7 | 12 |

(a) i. Calculate the mean score for participants who did no revision before their test,

giving the answer correct to one decimal place. (1 mark)

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ii. Calculate the median score for participants who did 2 hours of revision before

their test. (1 mark)

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(b) State whether Miss Kicinski’s research is experimental or non-experimental and provide one reason for your response. (2 marks)

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Question 3 (continued)

(c) The data collected for the research was quantitative.

i. Provide one benefit of collecting quantitative data. (1 mark)

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ii. Provide one benefit of collecting qualitative data. (1 mark)

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(d) Describe one way that Miss Kicinski could increase the validity in this scenario. (2 marks)

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**End of Section One**

**Section Two: Short Answer 55% (93 marks)**

This section has six questions. Answer all questions. Write your answers in the spaces provided.

Supplementary pages for planning/continuing your answers to questions are 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.

Suggested working time: 90 minutes

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Question 4 (17 marks)

In the Netflix drama, The Queen’s Gambit, the main character is Beth, a chess prodigy who strives to become the greatest chess player in the world. The game of chess requires skills that are dominantly controlled by the left or right cerebral hemispheres in the brain.

(a) For the following examples, identify whether the left or right hemisphere is more

dominant.

i. Recognising that the chess board has a pattern of dark and light squares.

(1 mark)

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ii. The abstract reasoning required when working out which piece to move (if I

move my rook here, then I can take out his bishop). (1 mark)

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iii. Visualising in your mind a combination of moves to make on the board.

(1 mark)

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iv. Moving a chess piece with your left hand. (1 mark)

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Question 4 (continued)

(b) Describe the location of the cerebral cortex in the brain. (2 marks)

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(c) Describe the physical structure of the corpus callosum. (1 mark)

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(d) i. Using the diagram below, identify the part of Phineas Gage’s brain that

sustained most of the damage during his accident (shade in or draw a line

around the part). (1 mark)



ii. Name the research method used to study one person, such as Phineas Gage,

or a small group of people. (1 mark)

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Question 4 (continued)

(e) Describe the path messages take when travelling through a sending (presynaptic) neuron to a receiving (post synaptic) neuron. (4 marks)

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(f) i. Explain how fast-growing tissues in the brain, such as cancerous tumours, are

detected by the positron emission tomography scan (PET). (2 marks)

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ii. Outline two differences between an MRI scan and fMRI scan. (2 marks)

One:

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Question 5 (14 marks)

(a) Explain two ways in which exercise can affect emotion. (4 marks)

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(b) i. Comment on the effect that recreational drugs have on perception. (1 mark)

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ii. Name one recreational drug that may cause the effect described in part (i).

(1 mark)

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Question 5 (continued)

(c) Complete the table below. (8 marks)

|  |  |  |
| --- | --- | --- |
|  | **Amphetamine** | **Alcohol** |
| **Class of drug** |  |  |
| **Effect on central nervous system** |  |  |
| **Effect on breathing rate** |  |  |
| **Effect on confidence levels** |  |  |

Question 6 (14 marks)

When viewing stimuli, part of the image projected onto the retina of the eye is obstructed by the spot at which the optical nerve joins the retina. This spot is known as the ‘blind spot’.

(a) Name the process that allows the brain to fill the gap formed by the blind spot and

form a whole coherent image. (1 mark)

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(b) Outline one reason why psychologists study illusions. (1 mark)

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(c) Is the image below shifting between a rabbit and duck due to it being a visual illusion, or is it due to a shift in attention? Explain your response. (3 marks)

Shape

Description automatically generated

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Question 6 (continued)

(d)  State one example of an altered state of consciousness that occurs naturally

and one example of an altered state of consciousness that can be induced.

(2 marks)

Naturally occurring: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Induced: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(e) i. A nurse is wanting to check whether a patient has been anaesthetised and is

ready for surgery. Name **one** physiological measure the nurse could use in

order to determine the station of consciousness of the patient. (1 mark)

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ii. Outline the reading likely to be shown by the physiological measure named in

part (i) if the patient has in fact been anaesthetised. (1 mark)

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(f) There are certain recreational drugs that can cause the user to enter a drug-induced state of consciousness where the heart rate increases above normal levels. Identify one such drug. (1 mark)

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Question 6 (continued)

(g) A researcher investigating attention set up a number of trials using a mouse

placed inside a cage with one side made of clear perspex allowing for the mouse

to be observed.

i. Through a small speaker in the cage, a large ‘bang’ was sounded and the

mouse jumped in shock. Describe the behaviour of the mouse after the

banging noise was sounded 5 or 6 times over a minute. (1 mark)

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ii. Name the process that is described in part (i).  (1 mark)

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iii. A few minutes later a new sound, a shrill ‘ding’ noise, is made. Describe the

behaviour that the researcher would likely observe in the mouse. (1 mark)

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iv. Name the process that is described in part (iii). (1 mark)

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Question 7 (18 marks)

(a) A psychologist is providing therapy to a new client, Chris, who was encouraged by

his girlfriend to attend, but who is not particularly open to the experience.

i. As the psychologist asks Chris questions, he is not replying to her in detail,

however, he is making gestures as he speaks. Explain how Chris’ gestures

can help the psychologist provide him with beneficial therapy.

(2 marks)

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ii. There are many examples of gestures that humans use when communicating,

whether or not they are aware they are making them. List **three** examples of

gestures. (3 marks)

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(b) There are some facial expressions that can help humans to survive. When showing fear, pupils dilate and the mouth is open. Explain how dilated pupils and an open mouth would improve the survival rate of a human in danger. (4 marks)

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Question 7 (continued)

(c) Explain why sign language, such as Auslan, is not considered ‘body language’.

(2 marks)

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(d) Robinson published a book in 2003 which drew attention to the different ways

adults communicate socially.

i. Name the nonverbal social skill addressed by Robinson. (1 mark)

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ii. According to Robinson, using politeness as a behaviour when communicating

requires two concepts that need to be taken into account. Outline these two

concepts. (2 marks)

One: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Two:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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(e) Define the term ‘hearing impairment’. (1 mark)

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Question 7 (continued)

(f) Annie is 8-years-old and presents with language delays due to having a mild

intellectual disability. Outline three ways that the delay in her language skills would

affect her development in primary school. (3 marks)

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**Question 8 (16 marks)**

(a) Explain why it is difficult to define ‘intelligence’. (2 marks)

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(b) The multiple intelligences theory claims that there are numerous intelligences that

each person possesses.

i. Name the theorist who developed this theory. (1 mark)

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ii. Contrast between intrapersonal intelligence and interpersonal intelligence.

(2 marks)

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iii. Describe how multiple intelligences can be used by primary school teachers in

the classroom. (1 mark)

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Question 8 (continued)

(c) Below is a diagram used to describe the two-factor theory.

Diagram, venn diagram

Description automatically generated

i. Identify what part ‘G’ in the diagram refers to. (1 mark)

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ii. Identify what part ‘S’ in the diagram refers to. (1 mark)

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iii. Name the theorist who developed the two-factor theory of intelligence.

(1 mark)

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iv. The theorist named in part (iii) administered a range of tests on children and

found scores on tests, such as maths and logical reasoning, had strong

positive correlations with each other. Explain what this means. (2 marks)

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Question 8 (continued)

(d) Wechsler produced tests for both children and adults that formed a score.

Name the score that was produced. (1 mark)

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(e) Individual intelligence testing requires the examiner to build rapport with the test

taker. Outline how this may be a benefit of individual intelligence testing as well as

be seen as a limitation. (2 marks)

Advantage: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Disadvantage: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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(f) Explain why scores are generally dependent on reading ability in group intelligence

tests, while in individual intelligence tests, scores are not generally dependent on

reading ability. (2 marks)

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**Question 9 (14 marks)**

(a) Popular Australian research on the formation of adolescent groups suggests that

peer groups change over time and move through a number of distinct stages.

i. Identify the number of stages theorised in the research. (1 mark)

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ii. At which stage does group membership require a degree of conformity among

members? (1 mark)

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iii. Which stage is made up numerous couples that spend time together?

(1 mark)

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iv. During which stage does dating between adolescents occur? (1 mark)

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(b) Provide **two** reasons why bullying is a form of anti-social behaviour. (2 marks)

One: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Two: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Question 9 (continued)

(c) Outline two characteristics of pro-social behaviour. (2 marks)

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(d) Empathy is one aspect of pro-social behaviour that is believed to be a motivation

for people to help others.

i. Using an example, describe the term ‘empathy’ and explain how it could lead

someone to want to help another person. (3 marks)

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Question 9 (continued)

ii. Vincent is 3-months-old and cries when he requires his needs to be met.

Explain why his survival is partially dependent on his primary caregiver having

the ability to feel empathy. (3 marks)

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**End of Section Two**

Section Three: Extended Answer 25% (52 marks)

Section three consists of two questions. You must answer both questions.

Supplementary pages for planning/continuing your answers to questions are 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.

Suggested working time: 60 minutes.

Write your answer to Question 10 on pages 27-32. When you have answered this question, turn to page 33 for Question 11 and write your answer on pages 34-39.

**Question 10 (26 marks)**

Year 12 students, Christine and Adelle, met at the Pulse Perspectives exhibition of year 12 art work at the Art Gallery of WA. They started chatting after Adelle complimented Christine on the dress she was wearing and after a few hours discussing the exhibited art together, they exchanged numbers and agreed to meet for coffee the following week. As Christine had her licence and Adelle only lived 10 minutes away, she gave Christine a lift to the café and in return, Adelle paid for Christine’s coffee and cake at the café. Over time, they became close friends.

In your answer you should:

* Define the term ‘liking’. (1 mark)
* Name and outline the **three** determinants of liking and provide an example of how each determinant of liking can be seen between Christine and Adelle. (9 marks)
* Name the researcher and research method that is commonly associated with studying adolescent peer group structure. (2 marks)
* List and outline the **three** levels of peer groups in adolescence and identify the level that relates to Christine and Adelle. (7 marks)
* Refer to psychological evidence and understandings. (4 marks)
* Quality of response (3 marks)

**Question number: \_\_\_\_\_\_\_\_\_\_\_**

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**Question 11 (26 marks)**

In the 1960s, Paul Ekman visited people from different cultures and took photographs of their expressions given when presented with scenarios. He then asked participants from around the world to identify the emotions shown in the photographs and discovered that more than 90% of expressions were recognised around the world. Ekman theorised six common facial expressions that are recognised universally.

The ability to recognise facial expressions allows for the emotions of people around us to be identified. Emotional intelligence (EQ) became popularised in the late 1990s and many believe it is as important as IQ for social, academic and professional success.

In your answer you should:

* Define the term ‘facial expression’ and name the category of communication. (2 marks)
* List **four** common facial expressions that are universally recognised. (4 marks)
* Name the theorist who popularised EQ theory in the late 1990s and outline the **three** main concepts that make up EQ. (4 marks)
* Suggest **two** reasons why many people believe EQ is a valuable skill that leads to success in the workplace. (4 marks)
* Define the term ‘active listening’ and, considering an individual with high EQ, provide **two** examples to show how they could actively listen to another person. (5 marks)
* Refer to psychological evidence and understandings. (4 marks)
* Quality of response (3 marks)

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Additional working space

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**End of Examination**