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AQA

AS and A-LEVEL

Psychology

New edition

BRILLIANT MODEL ANSWERS

Biopsychology

Fully revised and updated for the 2025 AQA Psychology A-level specification

- Provides the key knowledge and skills for exam success
- All types of questions covered
- Grade A model answers
- Written by examiners

Do brilliantly in your Psychology exam!

Nicholas Alexandros Savva

psychologyzone.co.uk

Proven exam success | Written by examiners | Concise, detailed and clearly written model answers

Brilliant Model Answers

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Please note: this book is not endorsed by or affiliated to the AQA exam board.

Important information

Do not skip this page!

The 'unpredictable' exam is more 'predictable' than you think

This guide is part of Psychologyzone's Brilliant Model Answers series covering A-level Psychology. Use it alongside the Psychologyzone series Brilliant Exam Notes to get the best out of your learning.

This guide covering the topic of Social Influences provides a full set of exam-style questions and model answers to help you do well in the exam. After all, your psychology exam is based on answering questions – what better than to have a book that already has the answers for you!

The exam board has deliberately developed the A-level Psychology specification so that the questions are to some extent 'unpredictable' in order to discourage students from attempting to rote-learn (memorise answers) using pre-prepared questions. This makes it difficult to predict what's going to be asked.

We have tried to make the unpredictable 'predictable'...

There are over 100 model answers in this book. We have covered most of the different types of question they can ask you for each topic on the specification. You can adapt the model answers provided to most types of questions set in the exam.

Some of your model answers seem very long. Why?

Some of the answers are much longer responses than you are expected to write in the exam to get top marks. **This is deliberate**. We have written them in this way to enable you to have a better understanding of the theories, concepts, studies and so on. If you do not write as much, don't panic; you don't need all of the content to achieve a good grade.

As you may be using this as a study book, we thought we'd write the model answers in a way that you can also revise from them, so we sometimes expand on explanations or give an example to help you understand a topic better.

Many of the model answers start by repeating the question; in the real exam you do not need to waste time doing this – just get stuck in!

Remember - in your exam, your answers will be marked according to how well you demonstrate the set assessment objectives (AOs); therefore, we have tried to provide model responses that show you how to demonstrate the required know-how for these AOs. Each example provides you with 'indicative content': in other words, the response gives you an idea of points you could make to achieve maximum marks; it doesn't mean these are points you must make. The purpose of these model answers is to inspire you and demonstrate the standard required to achieve top marks.

Exam skills

How will your answer be assessed?

Your teachers will have explained that your answers in the examination will be assessed on what examiners call **assessment objectives (AO).** If you can familiarise yourself with these AO, this will help you write more effective answers and achieve a higher grade in your exam. There are three assessment objectives called **AO1, AO2** and **AO3**.

By now, your teachers should have given you a lot of practice exam questions and techniques on how to answer them. The aim of this book is not to teach you these skills, but to show you how this is done – to model the answers for you.

Just to remind you, below are the AQA assessment objectives:

AO1 **Knowledge and understanding**

Demonstrate knowledge and understanding of scientific ideas, processes, techniques and procedures

What does this mean?

The ability to describe psychological theories, concepts, research studies (e.g. aim, procedures, findings and conclusions) and key terms. The exam questions can cover anything that is named on the specification.

Example

Explain the process of synaptic transmission. **[5 marks]**

Outline the role of the somatosensory centre in the brain. **[3 marks]**

AO2 **Application**

Apply knowledge and understanding of scientific ideas, processes, techniques and procedures:

- in a theoretical context
- in a practical context
- when handling qualitative data
- when handling quantitative data.

What does this mean?

Application questions require you to apply what you have learnt about in Psychology (theories, concepts and studies) to a scenario (situation) often referred to as 'stem' material. A scenario will be a text extract or quote given in the question. You are treated as a psychologist and you need to explain what is going on in the situation from what you have learnt.

Example

Chris suffered a stroke to the left hemisphere of his brain, damaging Broca's area and the motor cortex.

Using your knowledge of the functions of Broca's area and the motor cortex, describe the problems that Chris is likely to experience. **[4 marks]**

AO2 **Evaluation**

Analyse, interpret and evaluate scientific information, ideas and evidence, including in relation to issues, to:

- make judgements and reach conclusions
- develop and refine practical design and procedures.

What does this mean?

Evaluation simply means assessing the 'value' (hence 'evaluation' of a theory or study you have been describing. There are many ways you can evaluate theories or studies. For students, evaluation often takes the form of the strengths and weaknesses of the theory and/or study, but evaluation can also be in a form of 'commentary' (neither strength nor weakness but more in the form of an 'analysis' – which is still an evaluation).

Example

Outline one strength and one limitation of post-mortem examination. **[2 marks + 2 marks]**

The different types of exam questions

We have grouped the exam questions into four different types:

Identification questions	Multiple-choice questions, match key words with a definition, tick boxes or place information in some order or in a box.
Short-response questions	Questions worth up to 6 marks (e.g. 1, 2, 3, 4, 5 or 6 marks). These are often questions asking you to 'outline', 'explain', or 'evaluate' a theory or a study.
Application questions	These require you to apply the psychological knowledge you have learnt (theories, concepts and studies) to a real-life scenario given in the exam question.
Long-response question	These deal with long answers worth over 6 marks (8, 12 or 16 marks). The long-response answers found in this book will be mainly for 16-mark questions.

How the model answers are structured

We have tried to structure your learning by breaking down the model answers into four distinct categories

Key terms, concepts, and **theories** that are named on the AQA specification are covered by the identification and short-response questions (e.g. explain what is meant by the term…).

Research questions asking you to outline a study, describe a theory or give an evaluation are covered by short-response questions (e.g. briefly outline one study that has…).

Application questions require you to apply your knowledge to a made-up scenario (situation) and are covered under application questions.

Essay questions 'Outline and evaluate', or 'Discuss'-type questions are covered under long-response questions. Some long-response questions also require the application of knowledge.

Specification: Biopsychology

Biopsychology specification

AQA

- The divisions of the nervous system: central and peripheral (somatic and autonomic).
- The structure and function of sensory, relay and motor neurons. The process of synaptic transmission, including reference to neurotransmitters, excitation and inhibition.
- The function of the endocrine system: glands and hormones.
- The fight or flight response including the role of adrenaline.
- Ways of studying the brain: scanning techniques, including functional magnetic resonance imaging (fMRI); electroencephalogram (EEGs) and event-related potentials (ERPs); postmortem examinations.
- Localisation of function in the brain and hemispheric lateralisation: motor, somatosensory, visual, auditory and language centres; Broca's and Wernicke's areas, split brain research. Plasticity and functional recovery of the brain after trauma.

Nervous system

Identification questions

Q1 Complete the following sentence.

Circle one letter only. **[1 mark]**

Motor neurons carry information

A. away from the brain.

B. both to and from the brain.

C. towards the brain.

D. within the brain.

Q2 Which one of the following body responses is the results from the action of the sympathetic division of the autonomic nervous system?

Circle one letter only. **[1 mark]**

A. Decreased pupil size

B. Increased digestion

C. Increased heart rate

D. Increased salivation

Q3 Complete the following sentence.

Circle one letter only. **[1 mark]**

The somatic nervous system:

A. comprises of two sub-systems.

B. connects the central nervous system and the senses.

C. consists of the brain and spinal cord.

D. controls involuntary responses.

Q4 Read the following statements and decide whether they are TRUE or FALSE:

Circle one letter for each question **[2 marks]**

(a) Motor neurons carry messages to the central nervous system.

A. TRUE

B. FALSE

b) The nucleus of a neuron is found outside the cell body (soma).

A. TRUE

B. FALSE

Q5 Which two of the following statements about the divisions of the nervous system are correct?

Circle two letters only. **[2 marks]**

A. The fight-or-flight response occurs when the parasympathetic division controls functioning.

B. The central nervous system consists of the brain and spinal cord.

C. Sensory, relay and motor neurons are all controlled by the somatic nervous system.

D. Sensory neurons carry messages from the central nervous system.

E. The somatic nervous system controls voluntary movement.

Q6 Label the two areas of the synapse in the diagram below.

Write the appropriate letters in the answers in the boxes provided. **[2 marks]**

In the human nervous system...

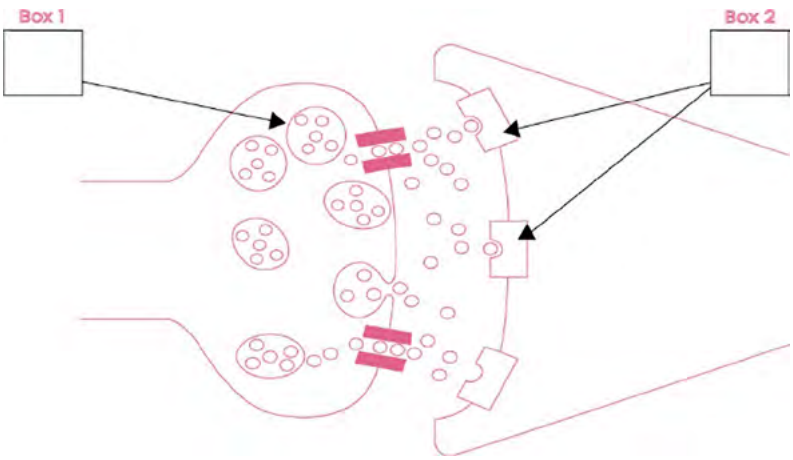
A. Axon

B. Dendrites

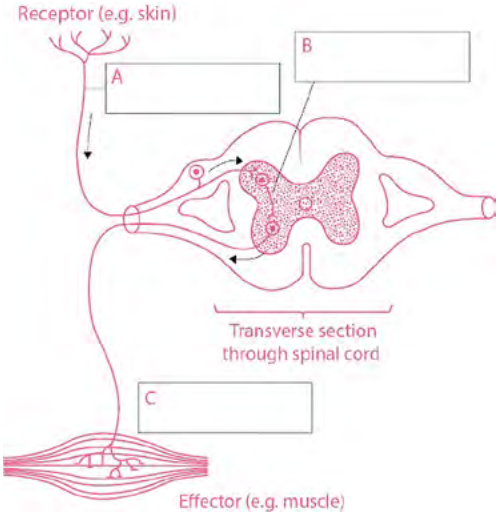
C. Neurotransmitters

D. Receptor sites

E. Vesicle

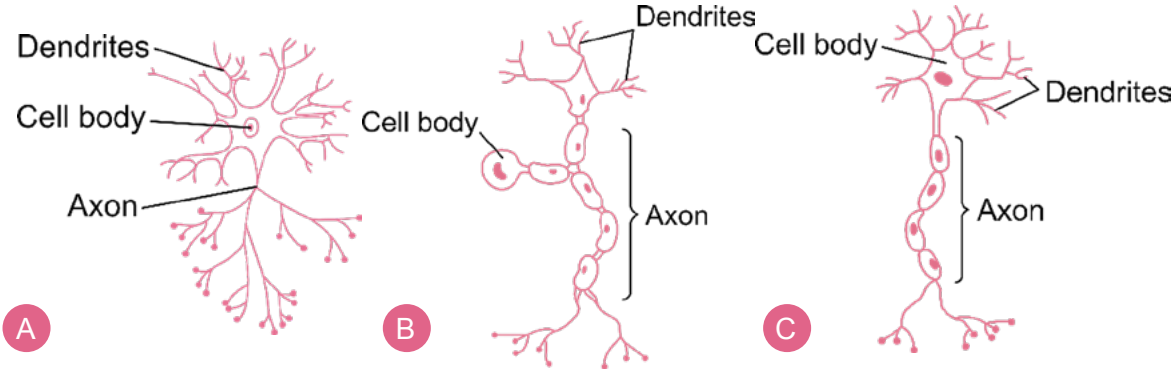


Q7 Name the types of neurons labelled A, B and C on the figure below.
Write your answers in the boxes provided **[3 marks]**



Q8 The diagram shows three different types of neuron. **[3 marks]**

Use the letters A, B, and C, to answer the following questions.



a. Which neuron is only found in the brain/visual system/spinal cord?

Circle one letter.

A B C

b. Which neuron carries nerve impulses from the brain/spinal cord to muscles/glands?

Circle one letter.

A B C

c. Which neuron carries nerve impulses between neurons?

Circle one letter.

A B C

Short-response questions

Q9 Identify two components of the central nervous system. **[2 marks]**

The brain and spinal cord.

Q10 Outline the role of the central nervous system. **[4 marks]**

The central nervous system (CNS) comprises the brain and spinal cord and has two main functions: to control our behaviour and to regulate the body's physiological processes. To do this, the brain receives information from the sensory receptors (e.g. eyes and skin) from the environment and then sends messages to the body's muscles (e.g. arms, legs) and glands. These messages are sent through the spinal cord, a collection of nerve cells that are attached to the brain and run the length of the spinal column.

Q11 Identify two divisions of the autonomic nervous system. **[2 marks]**

The sympathetic nervous system and the parasympathetic nervous system.

Q12 Outline the role of the somatic nervous system. **[4 marks]**

The somatic nervous system (SNS) is responsible for transmitting sensory information via the central nervous system (CNS) to other areas of the body. The SNS does this by carrying sensory information from the environment (e.g. eyes, sound, skin), via the nerves and sensory neurons to the CNS (spinal cord and brain), which then sends the information to other areas of the body (e.g. skeletal muscles), using motor neurons. The SNS is also involved in reflex actions without the involvement of the central nervous system, which allows the reflex to occur very quickly.

Q13 Outline the role of the autonomic nervous system. **[4 marks]**

The role of the autonomic nervous system (ANS) is to regulate involuntary actions of the internal body organs, such as heartbeat, glands, digestion, breathing, without us being consciously aware of this happening. The ANS has two parts: the sympathetic and parasympathetic systems. These systems work on the same organs but have opposite effects. The sympathetic system is primarily involved in responses that help us deal with threats or emergencies by increasing heart rate, breathing and blood pressure, etc. The parasympathetic system is involved with energy conservation and slows down physiological activity (heart rate, blood pressure, breathing, etc.).