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AQA

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Psychology

BRILLIANT MODEL ANSWERS

Memory

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- All types of questions covered
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- Written by examiners

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Brilliant Model Answers

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Content for model answers

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 '**evalu**ation' 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.

The multi-store model of memory

Identification questions

Q1 Below is a diagram of the multi-store model of memory. Review the keywords below, then select the four terms that match A, B, C and D on the diagram and enter the correct letter in the box.

Sensory register ☐

Long-term memory ☐

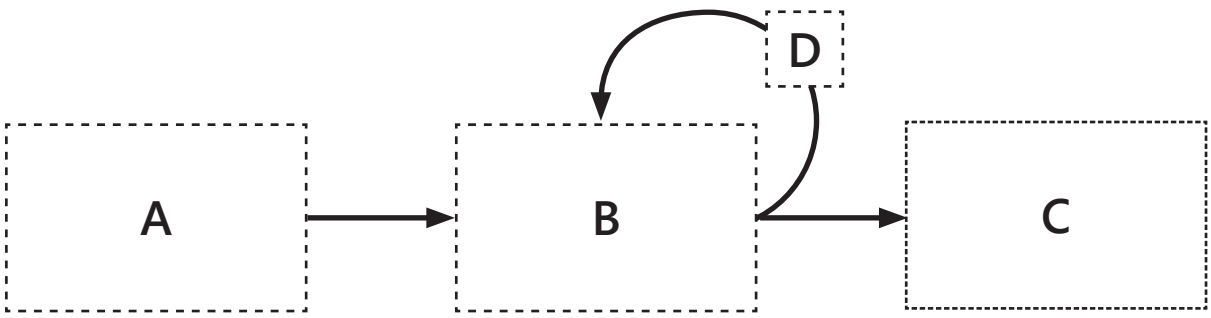
Central executive ☐

Short-term memory ☐

Rehearsal loop ☐

Phonological store ☐

[4 marks]



Q2 Complete the missing parts of the table, in relation to features of the multi-store model of memory. **[4 marks]**

	Capacity	Duration	Coding
Sensory register		250 milliseconds	Modality specific
Short-term memory	7 +/-2		
Long-term memory	Unlimited	Potentially forever	

Q7 Explain the difference between short-term and long-term memory. **[3 marks]**

Short-term memory (STM) and long-term memory (LTM) differ in terms of encoding, capacity and duration. In terms of encoding, STM tends to encode information acoustically, whereas information in long-term memory is encoded semantically. The duration of the information held in STM is less than 30 seconds, whereas information held in LTM information may last a lifetime. STM has a limited capacity, approximately 7 plus or minus 2 digits, whereas LTM has a potentially unlimited capacity.

Q8 Explain what is meant by the term 'coding'. **[2 marks]**

Coding is a process of converting information into memory traces so it can be stored and remembered in memory. Information is stored in various forms. For example, short-term memory tends to code information acoustically, whereas information in long-term memory is coded semantically.

Q9 Explain what is meant by the term 'capacity'. **[2 marks]**

Capacity refers to how much information can be held in memory and it is often represented by the number of digits held. Short-term memory has a limited capacity of 7 plus or minus 2 digits (but this can be increased by chunking the digits), while long-term memory has an unlimited capacity.

Q10 Explain what is meant by the term 'duration'. **[2 marks]**

Duration is the amount of time information is held for in memory before it is no longer available. Short-term memory has a very limited duration, less than 30 seconds, if the information is not rehearsed. Long-term memory has a very long duration, possibly a lifetime.

Q11 Describe one study that has investigated coding in memory. **[4 marks]**

Conrad (1964) carried out an experiment to investigate coding in short-term memory. The participants were quickly shown a sequence of six letters that were acoustically similar (such as D, P, T, B, L, V) or acoustically dissimilar (such as K, Z, W, R, Y). The participants had to write down as many letters as they could, in the order they were given to them (to prevent rehearsal). Conrad found that the participants would wrongly recall the order of letters if they were acoustically similar than if they were acoustically dissimilar. This is because the letters sounded like each other, resulting in acoustic confusion and incorrect recall. This study shows that the STM attempts to code information acoustically even when it is presented visually.

Q21 A researcher investigating the multi-store model of memory tested short-term memory by reading out loud sequences of numbers that participants then had to repeat aloud immediately after presentation. The first sequence was made up of three numbers: for example, 8, 5, 2. Each participant was tested several times, and each time the length of the sequence was increased by adding another number.

Use your knowledge of the multi-store model of memory to explain the purpose of this research and the likely outcome. **[4 marks]**

The purpose of this experiment is to test the capacity of the STM by using the serial digit span technique. The gradual was increased by one more digit to see how much we can hold in STM. The test was carried out aloud because STM tends to code verbally/acoustically. According to research, most of the people tested would be able to repeat a sequence of between 5 and 9 items correctly.
This is because the multi-store model claims that STM has a limited capacity of 7 + or – 2 digits.

Long-response question

Q22 Describe and evaluate the multi-store model. **[16 marks]**

Atkinson and Shiffrin (1968, 1971) believed there were three components of memory: sensory memory (SM), short-term memory (STM) and long-term memory (LTM). This model attempts to explain how information is processed and flows from one memory store to another store. SM receives and processes information that enters through our senses. SM is modality-specific and has unlimited capacity but limited duration. After 2 seconds, information will fade if it does not receive attention. If the information receives attention, it is transferred into the short-term memory (STM) for processing. The STM has a limited capacity (the magic number 7+/-2) and duration (30 seconds or less) and codes information acoustically. To prevent the information fading in STM, a process of maintenance rehearsal (repetition) is needed. Through rehearsal (mainly verbal or acoustic), information is transferred from STM to LTM. The longer information is rehearsed in STM, the more likely it is to be transferred from STM to LTM for more permanent storage.

Information can be transferred by elaborative rehearsal, where the information is remembered in a meaningful way. LTM has unlimited capacity and unlimited duration, possibly lasting a lifetime, and information is coded semantically. Retrieval is the process of getting information from LTM and involves passing it back through STM, where it is then available for use. However, information can still be lost from LTM, primarily through the processes of interference and retrieval failure.

A strength of the multi-store model is that controlled laboratory studies (e.g. Peterson and Peterson, Baddeley) on capacity, duration and coding support the existence of a separate short and long-term store, which make up the MSM. Furthermore, studies using brain-scanning techniques have also demonstrated a difference between STM and LTM. For example, Beardsley (1997) found that the prefrontal cortex is active during STM but not LTM tasks, and Squire et al. (1992) found the hippocampus is active when LTM is engaged.