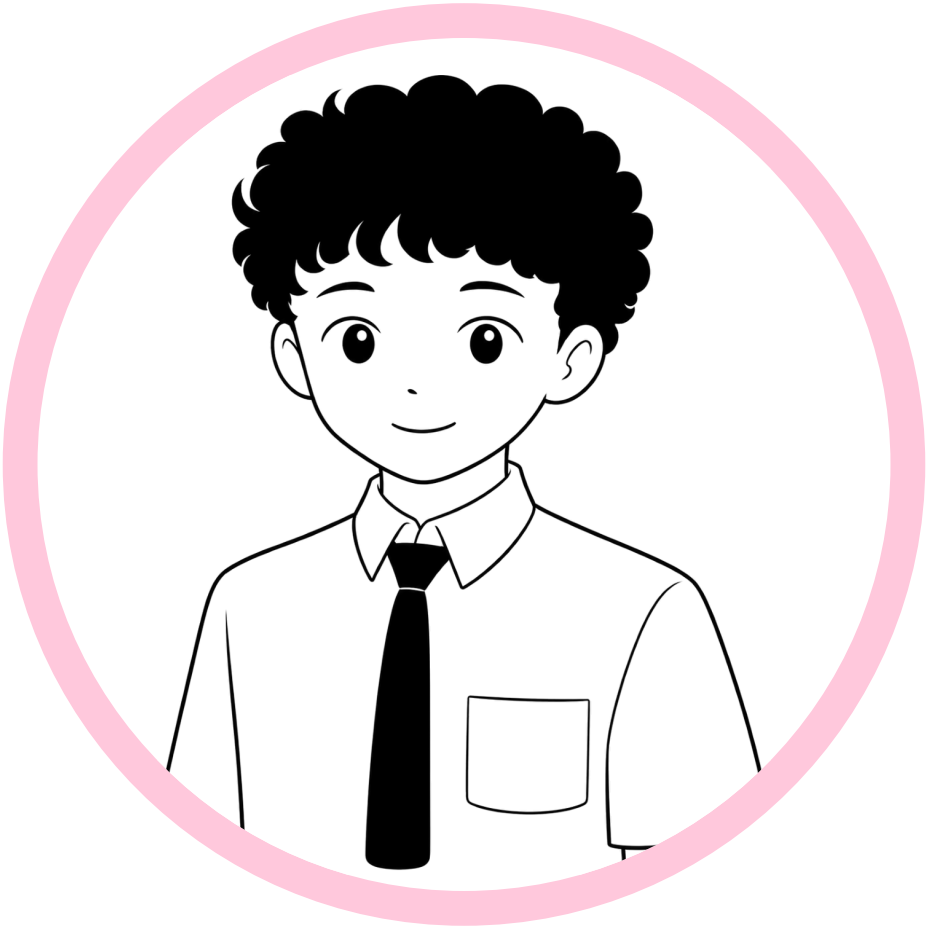
AQA A-LEVEL PSYCHOLOGY · 7182

PSYCHOLOGY



EXAM QUESTION PACK

3.1.2 THE MULTI-STORE MODEL

SCORE	PERCENTAGE
/148	%

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Q1.

Suggest **one** way in which the working memory model might be a better explanation of short-term memory than the multi-store model.

_____

_____

(Total 1 mark)

Q2.

Identify the main type of coding used in **each** of the following components of the multi-store model of memory.

Short term memory _____

Long term memory _____

(Total 2 marks)

Q3.

In an investigation into memory, participants were presented with two different lists of words.

List A	List B
Flip	Huge
Flit	Large
Flop	Great
Flap	Giant
Flab	Vast
Flan	Mighty
Flat	Epic

After seeing the lists, participants were tested on their ability to recall the words.

When tested immediately, participants found it more difficult to recall the words from **List A** in the correct order.

When tested after 30 minutes, participants found it more difficult to recall the words from **List B** in the correct order.

Using your knowledge of coding in memory, explain these findings.

_____

_____

_____

_____

_____

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(Total 4 marks)

Q4.

Outline what psychological research has shown about short-term memory according to the multi-store model of memory.

(Total 4 marks)

Q5.

(a) Read the item and then answer the questions that follow.

> 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.

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(4)

(b) After the study was completed, the researcher decided to modify the study by using sequences of letters rather than numbers.

Suggest **one** 4-letter sequence **and one** 5-letter sequence that the researcher could use. In the case of **each** sequence, give a justification for your choice. Use a different justification for each sequence.

(4)
(Total 8 marks)

Q6.

Outline and evaluate the multi-store model of memory.

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(Total 8 marks)

Q7.

Complete the missing parts of the table, **A**, **B**, **C** and **D**, in relation to features of the multi-store model of memory.

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

(Total 4 marks)

Q8.

Psychologists conducted a case study of Patient X, an individual who developed severe amnesia following a car accident. Patient X has difficulty storing new long-term memories, though his short-term memory and his memory for events that happened before the accident are unaffected.

(a) Evaluate the use of case studies, like that of Patient X, in psychological research.

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(5)

(b) Briefly explain how the experiences of Patient X could be interpreted as supporting the multi-store model of memory.

(2)

(c)

The same psychologists conducted an experiment with Patient X where he was given the task of tracking a rotating disc every day for a week. It was found that Patient X's performance on the task improved with practice, though he had no recollection of ever having done the task, and could not remember the names of the psychologists who conducted the experiment.

With reference to the experiment involving Patient X, outline **two** types of long-term memory.

(4)

(b) Discuss **two** differences between the types of long-term memory you have outlined in your answer to **part (c)**.

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(4)

(Total 15 marks)

Q9.

According to the multi-store model of memory, there are several ways in which short-term memory and long-term memory differ.

Explain how the findings of **one or more** studies demonstrate that short-term memory and long-term memory are different.

Extra space

(Total 4 marks)

Q10.

Research has suggested that the encoding and capacity of short-term memory are different from the encoding and capacity of long-term memory.

Explain what is meant by coding.

(Total 2 marks)

Q11.

Outline the difference between the capacity of short-term memory and the capacity of long-term memory.

(Total 2 marks)

Q12.

The multi-store model of memory proposes that there are separate short-term and long-term stores.

Explain **two** differences between short-term memory and long-term memory in this mode

Difference 1

Extra space

(2)

Difference 2

Extra space

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(2)

(Total 4 Marks)

Q13.

Describe and evaluate the multi-store model of memory. Refer to evidence in your answer.

(Total 16 marks)

Q14.

Describe **and** evaluate the multi-store model of memory.

(Total 16 marks)

Q15.

Describe **and** evaluate the multi-store model of memory.

(Total 12 marks)

Q16.

A, **B** and **C** relate to memory. Write the appropriate letter in the box below. The first one has been done for you.

A 7 ± 2

B Up to 30 seconds without rehearsal
Write letter **B** in the appropriate box below.

C Mainly acoustic
Write letter **C** in the appropriate box below.

	Short-term memory	**Long-term memory**
Encoding		
Capacity	**A**	
Duration		

(Total 2 marks)

Q17.

Jamie wanted to contact his doctor. He looked up the number in his telephone directory. Before he dialled the number, he had a short conversation with his friend. Jamie was about to phone his doctor, but he had forgotten the number.

Use your knowledge of the multi-store model to explain why Jamie would not remember the doctor's number.

_____

_____

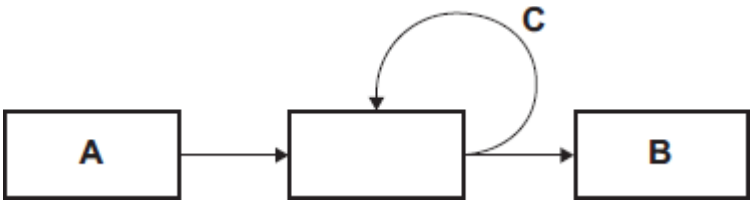
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Extra space

(Total 4 marks)

Q18.

This is a diagram of Atkinson and Shiffrin's multi-store model of memory.



From the following list, select the appropriate labels for **A**, **B** and **C**. Write **A**, **B** or **C** in the **three** correct boxes.

Secondary memory	
Long-term memory	
Recognition	
Rehearsal loop	
Central executive	
Sensory memory	

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Short-term memory 

(Total 3 marks)

Q19.

A researcher carried out an experiment to investigate how many numbers could be held in short-term memory. The participants were 15 children and 15 adults. Participants were asked to repeat lists of random numbers, in the correct order, as soon as they were read out by the researcher. For example, when the researcher said, “3, 4, 2, 8” the participant immediately repeated “3, 4, 2, 8”. When the researcher then said,“7, 5, 9, 6, 4” the participant immediately repeated “7, 5, 9, 6, 4”. One number was added to the list each time until participants were unable to recall the list correctly.Each participant’s maximum digit span was recorded.

(a) Write an appropriate non-directional hypothesis for this experiment.

_____

_____

_____

_____

(2)

(b) Explain why the researcher used an independent groups design for this experiment.

_____

_____

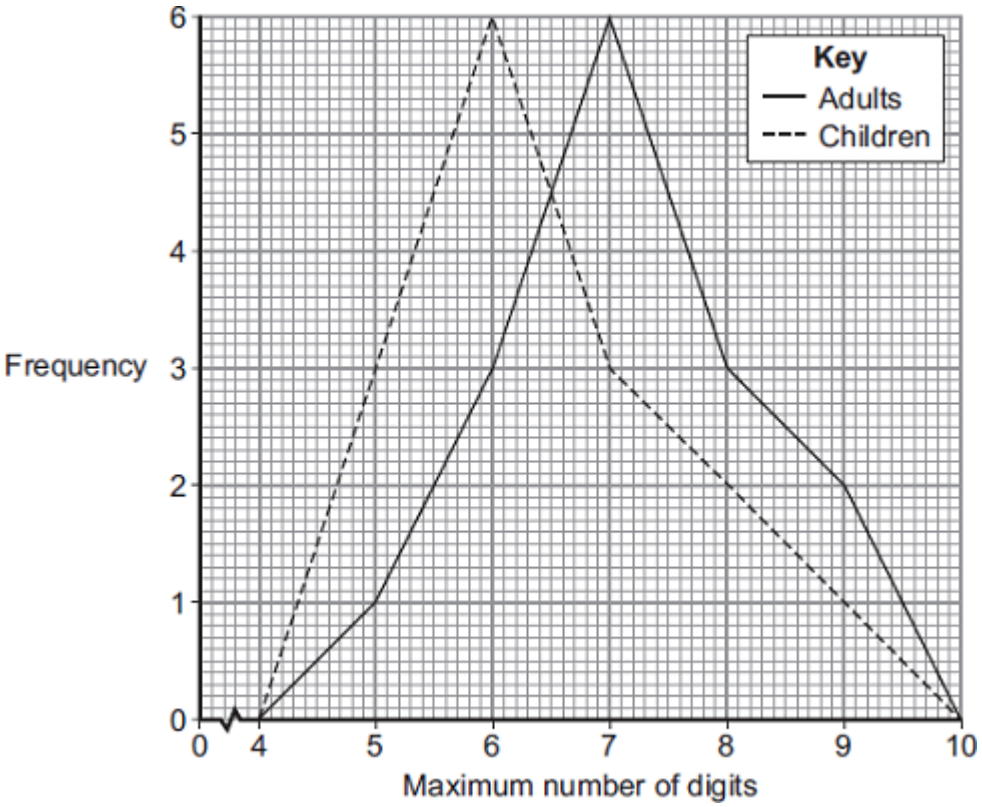
_____

_____

(2)

(c) **Frequency distribution of the maximum number of digits correctly recalled by children and adults**

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Write the mode for each group in the table below.

Age group	Mode
Children	
Adults	

(2)

(d) What does the frequency distribution show about the results?

(3)

(e) Do the results of this experiment support the findings of other research into the capacity of short-term memory? Explain your answer.

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(2)

(Total 11 marks)

Q20.

Describe **one** way in which psychologists have investigated the duration of short-term memory. In your answer, you should include details of stimulus materials used, what participants were asked to do and how duration was measured.

Extra space

(Total 4 marks)

Q21.

A case study was carried out on Peter whose brain was damaged in a motorcycle accident. Psychologists tested how many numbers he could hold in his short-term memory. They did this by reading him lists of numbers and asking him to recall the numbers immediately in the right order. He could recall a maximum of two items. The psychologists found that his long-term memory was normal.

(a) How was Peter's short-term memory after the accident different from most adults' short-term memory?

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(2)

(b) Does this case study support the multi-store model of memory? Explain your answer.

Extra space

(4)

(c) Identify **one** ethical issue associated with this case study of Peter. Suggest how psychologists could deal with this ethical issue.

Ethical issue

How psychologists could deal with this ethical issue

(4)

(Total 10 marks)

Q22.

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The following are all concepts relating to memory:

A Duration
B Capacity
C Encoding
D Retrieval.

In the table below, write which **one** of the concepts listed above (**A**, **B**, **C** or **D**) matches each definition.

Definition	Concept
The length of time the memory store holds information	
Transforming incoming information into a form that can be stored in memory	

(Total 2 marks)

Q23.

Outline the main features of the multi-store model of memory.

Extra space

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(Total 6 marks)

Q24.

The multi-store model of memory has been criticised in many ways. The following example illustrates a possible criticism.

Some students read through their revision notes lots of times before an examination, but still find it difficult to remember the information. However, the same students can remember the information in a celebrity magazine, even though they read it only once.

Explain why this can be used as a criticism of the multi-store model of memory.

Extra space

(Total 4 marks)

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