

## The Multi-Store Model – Questions by Topic

### Q1.

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)

### Q2.

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 model

(Total 4 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.

(Total 4 marks)

**Q4.**

- (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.

(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)

**Q5.**

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?

(2)

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

(4)

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

(4)

(Total 10 marks)

**Q6.**

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.

**(Total 4 marks)**

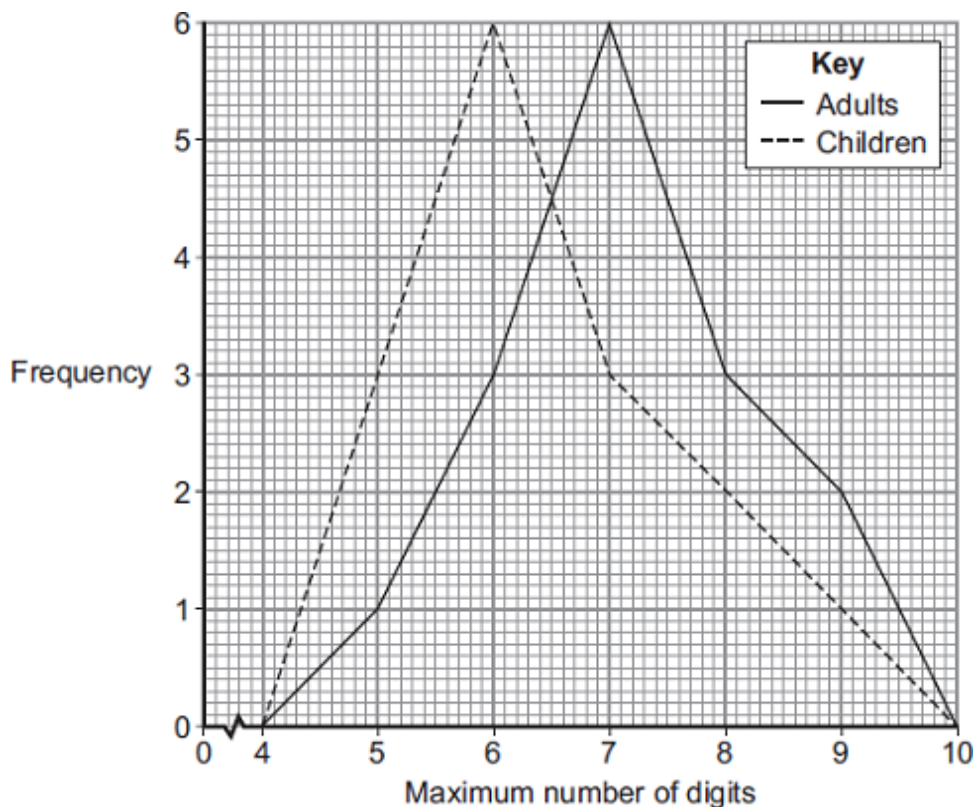
**Q7.**

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**



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.

(2)

**(Total 11 marks)**

**Q8.**

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

**(Total 16 marks)**