

Question 1

- (a) Draw a diagram to illustrate the 3 types of human memory. Explain your answer.
- (b) Complete the table below to highlight the differences between STM and LTM.

	STM	LTM
CAPACITY		
ACCESS		
DECAY		

- (c) According to Miller (1956), STM can hold between 5 to 9 chunks or pieces of information for a very short period of time. Based on Miller's studies on the capacity of STM, comment whether it is necessary for a designer to limit the number of items displayed in a **menu** to a maximum of 9? Give reasons for your answer.

Question 2 (*Present your answers using PowerPoint slides*)

- (a) Give 2 examples (*own examples*) of interfaces/displays where you are expected to remember more than what is reasonable. Explain your answer.
- (b) Give 2 recommendations on how interfaces/displays should be designed to avoid forcing the user to remember more than what is reasonable. Discuss whether these recommendations must be followed all the time.

Question 3

"In HCI, mental model refers to the user's current understanding of how "something" works (e.g how a system works). Very often the user's mental model does not match with what the system actually does".

Explain the above statement by using a suitable example (*the example provided must be based on your own experience*).

Additional questions (on your own, i.e. questions below will not be discussed during tutorial)

The understanding of human mental capability and limitation enable designer to create more usable systems. Suggest some of the guidelines of UI design related to the studies of human mental capability and give an example for each of the principle.

Examine one of your favourite and not so favourite applications. What sort of demands do they make upon you as a user? Are you expected to REMEMBER more than what is reasonable? Discuss.

"Memory and learning are closely linked and it is important to consider the ways in which people learn if effective human-computer systems are to be constructed." Comment on the statement above and explain how studies of HCI contribute to human learning.