<u>Review Questions</u>

Chapter 1

What is cognition? What is cognitive psychology?

What is the distinction between structure and process?

Who was Diogenes of Apollania?

What is the transcendental method proposed by Kant?

Know how Aristotle and Plato differed in their ideas of universals and particulars.

Where did St. Augustine think that cognition/ memory occurred?

What was psychophysics?

Who was Wilhelm Wundt?

What is the introspective method?

What is structuralism and who started this movement?

Who was Hermann von Ebbinghaus?

What is functionalism and who started this movement?

What is behaviorism and how did this movement affect cognitive psychology?

What events lead to the re-birth of cognitive psychology / science?

What are the assumptions of cognitive psychology?

Chapter 2

What does the scientific method require of experimental cognition?

What is a process model?

How do cognitive scientists measure information processing?

What are some common guiding analogies for cognitive scientists?

What is the Standard Information Processing Approach (Atkinson & Shiffrin, 1968)?

What is the problem with the Standard Information Processing Approach?

What are some problems with Process Models?

Explain Neisser's (1976) New Information Processing Approach.

Chapter 3

What types of photoreceptors does the human retina have and how are they distributed?

What is contralaterality?

How does sensation differ from perception?

What is Helmholtz's trichomatic colour perception theory?

What is the opponent process theory?

What is the order of neural activation in visual sensation?

What is the difference between bottom-up and top-down processing?

How do visual saccades and fixations differ?

What is visual persistence? And what is visual sensory memory?

Explain Sperling's (1960) tachistoscope experiment.

How does backward masking inform our understanding of iconic memory?

What is the format of representation in iconic memory?

How do template theories of pattern recognition differ from Feature theories?

What is the pandemonium theory?

What is the connectionism theory?

What is the recognition by components theory?

How quickly does pattern recognition copy information from sensory store to working memory?

What is prosopagnosia? Apperceptive agnosia? Associative agnosia?

What do are the implications of agnosias for cognitive science?

Chapter 4

What is explicit and implicit processing and give an example of each.

Describe two important factors related to selective attention in Norman's Pertinence Model.

Describe Johnston and Heinz's Multimode Model of Attention.

How does Kahneman's Capacity theory differ from the early, middle or late section models proposed by Broadbent, Treisman and Norman?

What were the main findings of Shiffrin & Schneider's (1977) study on controlled versus automatic search.

What are the disadvantages of automaticity?

Explain and describe the stroop effect.

Describe the procedures, results and implications (including the cost and benefits) of Posner and Snyder's (1975) study on high validity and low validity priming.

What is hemi-neglect?

How does Logan (1988), in his Instance Theory of Automaticity, explain how something becomes automatic?

Chapter 5

According to Sternberg, how do we access info from STM?

How did Sternberg determine how long it takes us to scan/search STM?

What are the limitations to Sternberg's conclusions?

STM can hold a variety of informational codes. Name four codes and provide evidence for each.

What are three differences between STM and WM?

Explain the serial position curve.

What is the effect of distraction, word frequency and rate of presentation on the serial position curve?

What is the difference between dissociation and double dissociation?

What is release from PI?

What is the difference between decay and interference in STM.

Chapter 6

What is the key difference between explicit and implicit memory?

What types of information are 'stored' in episodic and semantic memory?

Describe the mnemonic devices (1) Method of Loci and (2) Peg Word

Describe the procedure used by Rundus (1971). What were the results of this experiment?

What was Ebbinghaus's major contribution to the study of memory?

What are metamemory and metacognition?

Outline the Levels of Processing view (Craik & Lockhart). What was a major problem with this view?

What was the main finding in Bousfield's (1953) experiment on organization and storage of information in memory?

What is the paired-associate learning task?

What did Jenkins & Dallenbach do and what were the results of this experiment?

Chapter 7

Define semantic memory and give an example of a semantic memory.

What were the results of Loftus & Palmer's (1974) experiment?

Be able to describe the components in Collins & Quillian's "Network" model (i.e., what are nodes? Spreading activation? Intersection search?)

What is Smith's Feature Comparison Model? (i.e., what are feature lists? Defining features? Characteristic features?)

What is the 'sentence verification task'?

What is the 'typicality effect'?

What is a prototype?

Describe priming. (define: prime, probe/target, costs/benefits)

Define stimulus onset asynchrony (SOA).

What is connectionism?

Chapter 8

What are the 7 sins of memory?

What is hypermnesia?

What is reconstructive memory?

How did Ebbinghaus & Bartlett differ in their approach to studying LTM?

What were Barlett's major findings of how people recalled material over time?

What is a schema? Script?

Describe the Bransford & Franks (1971) study on semantic integration.

What's the difference between technical accuracy and content accuracy in memory?

What is a proposition? How did Sachs' study support the validity of propositions?