



PRIFYSGOL CYMRU

Y Drindod Dewi Sant

UNIVERSITY OF WALES

Trinity Saint David

**M5X00908 – Brian, Behaviour, and Cognition: Cognitive Psychology
Indicative Exam Answers 2015/2016 (May)**

Candidates are required to answer ONE question.

Q1. Critically discuss Cognitive explanations for why we forget.

Indicative answer: It would be expected that the student discuss the various cognitive theories of forgetting (e.g., trace-decay, repression, interference, cue-dependency, context-change, etc.). However, this question does have the scope to allow for a wide range of answers, with responses incorporating forgetting from various components, such as short-term memory, long-term memory, general or autobiographical memory, and even memory loss resulting from brain injury. Regardless of how the student approaches this question, what remains critical is that they ensure to provide relevant integration and evaluation of arguments. A weak answer would simply define forgetting and describe the different theories. A strong answer would include some empirical evidence and begin to give some discussion of studies. A very strong answer would identify strengths and weaknesses associated with each theory based on relevant studies and would clearly explain what the findings mean for theory.

Q2. Critically discuss how Cognitive biases influence human judgement and decision making.

Indicative answer: This question would require students to show an understanding of how humans make judgements and decisions. The students would need to include in their answers the relevant theories proposed to explained judgement (e.g., representative and availability heuristics, support theory) and decision making (e.g., loss aversion, framing, justification, anticipated regret) and provide a critical analyses of these theories based on findings from relevant empirical research. Weak answers would simply outline the different theories behind judgments and decision making. A strong answer would add to this by using relevant research studies to highlight the strengths and weaknesses of the various theories. A very strong answer would further this by providing a synthesis of argument and consider any wider implications.

Q3. Critically evaluate models of attention.

Indicative answer: Students should include information relating to the different models of attention. These would certainly need to include work by Broadbent, Treisman, and Deutsch & Deutsch. It would be up to the student to decide how they wish to structure their answer (i.e., discussing auditory and perceptual attention separately). A weak answer would simply describe the various theories without any synthesis of argument. A strong answer would provide relevant empirical studies to assess the appropriateness of the theories. A very strong answer would consider wider implications such as disorders of attention and divided attention in order to help critically evaluate the various theories put forward.

Q4. How does the brain represent visual information?

Indicative answer: This question allows for a broad range of answers, which could incorporate a very brief account of how sensory information arrives in the brain, but at the very least should include key theories such as Marr's computational theory, Biederman's Recognition-by-components, and the viewpoint dependent/invariant theories. Answers would need to keep the description of the theories highly concise in order to draw upon the empirical evidence to support or contradict the varying theories. There should be reference made to the various types of representations stimuli produces in the brain (e.g., shape, colour, etc.), and possibly where/what brain structures are involved. Answers could also incorporate cognitive models (e.g., Farah & McClelland; Humphreys et al.) and use evidence from cognitive neuropsychology (e.g., visual agnosia). Discussions relating to theories/models of face recognition would also be accepted.

Overall Comments

On the whole these were a good set of exam papers, with a significant improvement seen in terms of the quality of writing compared to the Cognitive essays that were submitted in April. There were some excellent answers for question 2 (judgement and decision making) and question 4 (perception) – it was good to see that students who had answered these questions had gone beyond the lecture notes, read up on the literature and had included additional material. However, as with Section C of the Biological exam, what was missing from a number of answers on these Cognitive exams was critique and evaluation. Most people would describe a particular theory/model but offer no empirical research or evaluative points. This was particularly the case for answers to question 1 (Forgetting) and question 3 (attention). These two questions were answered by the majority of the cohort, and although there were a few good answers, what a number of people did for these two questions was go for breadth as opposed to depth (so many different theories/models were mentioned but there was no real detail given for each). Below is a breakdown of the average mark for each question:

Question:	1. Forgetting	2. Judgement	3. Attention	4. Perception
Average Mark for each question	55	64	54	66