

Written Exam in Neuroscience			
	Excellent 10	Acceptable. 8.5	Unacceptable 7
Hypothesis/Specific Aims 20 % Identify the hypothesis being tested or the specific aims and scientific goals of the paper. Describe the scientific rationale or background of the hypothesis/goals. Assess the significance or scientific impact of the study (how it moves the field forward).	Excellent Hypothesis and aims clearly explained and fully understood. Thorough description of impact and significance.	Acceptable Good grasp of hypothesis/aims and significance except for minor gaps	Unacceptable Hypothesis/aims and significance not adequately explained
Experimental Design 20 % Describe the quality of the experimental design. Did the design adequately address the hypothesis or proposed aims? Describe strengths of weaknesses of the design. Indicate how the design might be strengthened: for instance, to address a more definitive outcome or improve the reliability of the data.	Excellent Provides detailed assessment of the adequacy of the experimental design, methods and expected outcomes. Identifies strengths and weaknesses and gives alternatives.	Acceptable Describes experimental design but lacks full assessment of their contribution to the hypothesis or missing elements of the approach. Strengths and weaknesses are described, but lack clarity or focus.	Unacceptable Fails to describe how the experimental design supports the hypothesis. Strengths and weaknesses are lacking or inadequate

Data and Interpretation 20 % Describe the major findings and the author's interpretation. Discuss the strengths and limitations of the data presentation and whether or not the interpretation is appropriate and based on the data. Describe the adequacy of experimental controls? Are there any concerns with human subjects or animal welfare?	Excellent Evaluation of data and the interpretation are accurate and clearly presented; strengths and limitations are clearly and accurately evaluated. Assessment of controls is addressed.	Acceptable Evaluation of the data and interpretation is addressed, but some minor points are poorly presented, incomplete or unclear, or strengths and limitations are not fully evaluated. Adequacy of controls is only partially discussed.	Unacceptable The answer does not clearly evaluate the adequacy of the data interpretation; strengths and limitations are inaccurate or not adequately addressed. Explanation of controls inadequate or not addressed.
Conclusions 20 % Are the conclusions of the authors justified based on the findings? Do the authors describe the importance of this study to the field and does it fairly represent findings of the experiments?	Excellent Describes how conclusions and implications are correctly or incorrectly explained in the paper and gives examples of how conclusions are based on the data.	Acceptable Describes how the conclusions are reached but misses some minor strengths or weaknesses in the conclusions.	Unacceptable Fails to adequately assess the quality of the conclusions and implication stated by the authors
Future Experiments 20 % What do you see as the next scientific question to emerge from this study? Design an experiment to test it.	Excellent Identifies a logical next question and a feasible experiment.	Acceptable Gives some suggestions for the next experiments but have minor errors or deficiencies in clarity or logic. Proposed experiment has identifiable weaknesses.	Unacceptable Future experiments suggested are not logical extensions of the paper. The experiment is not logical or feasible.