

EXAM 1 – STUDY GUIDE

Check the syllabus for the exact number of questions of the exam. Most of the questions will be based on material covered in lecture. It is also important that you read the chapters in the textbook – there will be questions that will come directly from the textbook (material not covered in lecture). If you can answer the questions on this study guide... you should have no problem with the exam. I am going to focus on the big concepts. If want you to be able to understand and apply the material ... not just spit back the facts.

Module 1- The History and Scope of Psychology

1. What is psychology?
 - a. Why do we care about psychology?
2. What are the major psychological perspectives?
 - a. What is the psychoanalytic perspective?
 - b. What is the behaviorist perspective?
 - c. What is the humanistic perspective?
 - d. What is the cognitive perspective?
 - e. What is the biopsychology perspective?
 - f. What is the social and cultural perspective?
 - g. What is the evolutionary perspective?
3. What is the difference between an experimental psychologist and an applied psychologist?
4. What is the difference between a psychologist and a psychiatrist?

Module 2- Research Strategies: How Psychologists Answer Questions

1. How do we study psychology?
 - a. What is empiricism/empirical evidence?
 - b. Why should we avoid bias?
 - c. Why should we replicate studies?
2. Be able to explain why psychology is a science.
 - a. What is the scientific method? Why is following the scientific method important?
 - b. What are the steps for gathering and evaluating evidence?
 - c. What is a theory? How is it different from a hypothesis?
3. What is an operational definition? Why do researchers use operational definitions?
 - a. Be able to identify an operational definition from other types of definitions.
4. What are the general principles of psychological research?
 - a. What are ethics?
 - i. What is informed consent?
 - ii. What is debriefing?
 - iii. Why do we need to worry about deception?
9. What are the differences between descriptive, correlational, biological, and experimental research methods?
 - a. What are descriptive research methods?
 - i. What is naturalistic observation?

- ii. What is a case study?
 - iii. What are surveys?
- b. What are experiments?
 - i. What is an independent variable? What is a dependent variable? Be able to identify from examples.
 - ii. What is an experimental group? What is a control group? What is random sampling?
 - iii. What do researchers need to avoid when designing experiments? How do researchers avoid bias?
- c. What are correlational studies?
 - i. How is correlational research different from experimental research?
 - ii. What is meant by the statement “correlation does not tell us anything about causation”?

Module 3- The Biology of the Mind: Neural and Hormonal Systems

1. What is a neuron?
 - a. Be able to identify the parts of a neuron and their primary functions [cell body, dendrite, axon, terminal buttons, myelin sheath].
 - b. What is the difference between a myelinated and unmyelinated neuron?
 2. How do neurons communicate? What is meant by the term “electrochemical”?
 3. What is an action potential? Why is an action potential considered all-or-none?
 - a. What is threshold? What is resting potential?
 4. What are synapses?
 - a. What is synaptic transmission? How do neurons talk to each other?
 - b. What are neurotransmitters?
 - i. Be able to describe the effect dopamine, serotonin, acetylcholine, GABA, and norepinephrine have on the nervous system.
 - ii. What is an agonist? What is an antagonist?
 - c. What are synaptic vesicles? Where are synaptic vesicles located?
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1. What is the nervous system?
 - a. What is difference between the peripheral nervous system (PNS) and the central nervous system (CNS)?
 - b. What makes up the PNS?
 - i. What is the autonomic nervous system?
 - ii. What is the parasympathetic nervous system?
 - iii. What is the sympathetic nervous system?
 - iv. What is the somatic nervous system?

- c. What makes up the CNS?
- d. What is endocrine system?

Module 4- The Biology of the Mind: The Brain

1. What is the central function of the “old brain?”
 - a. Identify the parts of the old brain (pay particular attention to the cerebellum and medulla).
 - i. What are their basic functions?
 - b. Identify the structures found in the midbrain. (The not-so-old, but not-so-new brain)
 - c. What are the functions associated with the “new” brain?
 - i. Identify the structures associated with the new brain (pay particular attention to the hypothalamus, hippocampus, amygdala, and cerebral cortex). What are their basic functions?
2. What is the cerebral cortex?
 - a. What are the four lobes? Describe their location and functions.
 - i. What is function of the primary somatosensory cortex?
 - ii. What is the function of the primary motor cortex?
 - iii. What are association areas?
3. What is the corpus callosum? What happens if you cut the corpus callosum?
 - a. What is the primary function of the right hemisphere?
 - b. What is the primary function of the left hemisphere?
 - c. What is Wernicke’s area? What is Broca’s area?
4. What is neuroplasticity? What is neurogenesis?