PSY100F SUMMER 2012: SAMPLE QUESTIONS MIDTERM 1

Here are some sample questions to give you an idea of my approach to asking questions. Hopefully you find that spending a few minutes with these sample questions will help you understand the sorts of questions that will be on your test.

1. How does your textbook describe the relationship between brain and mind?
a) The mind is what the brain does.
b) The brain is the result of the mind.
c) Brain and mind are interchangeable terms.
d) The brain is behaviour, the mind is thought.
e) none of the above

2) With regard to the debate over whether brain functioning is localized, it has been concluded that
a) there is some localization of function, but the integration of many different regions is required for most processes.
b) there is highly localized functioning for most thoughts but generalized functioning for behavior.
c) there is specialized functioning for behaviors but generalized functioning for thoughts.
d) there is no localized functioning; functioning in the brain is generalized across regions.
e) none of the above.

3. A parallel distributed process is a model for
a) long-term potentiation.
b) neural networks.
c) NMDA receptor action.
d) vagus nerve stimulation.
e) none of the above

4. According to John Watson, who was extremely influential in launching the field of behaviourism, what is the only valid outcome variable to measure?
a) overt behavior—because it alone can be rigorously studied using the scientific method
b) self-report—because it is the most accurate measurement of subjective states
c) psychoanalytic interpretation—because individuals do not know the drivers of their own subconscious
d) physiological measures (e.g., arousal) - because they are the only truly objective measures that require no interpretation
e) none of the above; in fact, Watson was famous for arguing that there were NO valid indicators, which is why psychology, in his opinion, could not be a science

5. Paul Broca's discovery (now called "Broca's area") was the first strong evidence that the brain has specific areas that control different aspects of mental functioning. What did Broca find?
a) He found that a region in the left, frontal area of the brain was crucial for the production of language.
b) He found that a region in the right hemisphere controlled the majority of complex movements.
c) He found that a region in the left occipital lobe was important for naming objects.
d) He found that severing a specific part of the corpus collosum was effective at reducing epileptic seizures.
e) None of the above

6. What is the key characteristic of operant conditioning that sets it apart from classical conditioning?
a) Operant conditioning accounts for more variability in the conditioned response.
b) Operant conditioning is the primary principle underlying advertising
c) Operant conditioning is reflexive rather than cognitively controlled.
d) Operant conditioning involves associating specific consequences with behaviour.
e) All of the above are equally true

7. If you are experiencing pain, which class of neurochemicals is likely active?
a) peptides
b) monoamines
c) amino acids
d) acetylcholines
e) none of the above

8. You are conducting a study for your psychology class on the effects of sleep deprivation on test performance. In this study, the dependent variable is the
a) control group.
b) test scores.
c) reported sleepiness.
d) amount of sleep deprivation.
e) test difficulty.

9. With each new experience, neural connections form in the cerebral cortex. These connections are governed by which subcortical structure?
a) the hypothalamus
b) the hippocampus
c) the thalamus
d) the hydroencephalus
e) the cerebellum

10. What types of experiences can interfere with neurogenesis?
a) stressful experiences
b) hebbian learning experiences
c) classical conditioning experiences
d) neonatal habituation
e) all of the above

11. Dr. Davis is studying the influence of racism on behavior. Which of the following tools might best allow her to examine the working brain (i.e., brain processes as they are occurring)?
a) fMRI
b) brain chemistry assay
c) attitude questionnaire
d) behavioral assessment test
e) all of the above

12. Neural connections that are not used eventually weaken and wither away. This process is called:
a) neural deactivation
b) long-term depotentiation
c) dendritic inhibition
d) decommissioning
e) pruning

13. In order for Pavlovian learning (i.e., classical conditioning) to occur, what must the conditioned stimulus have been paired with?
a) an unconditioned response
b) a conditioned response
c) an unconditioned stimulus
d) a consequence
e) a reward or punishment that the organism is biologically predisposed to respond to naturally (such as food, or pain)

14. While you're on a boat, the captain points and says "Look, over there!" You orient toward where he's pointing to locate the object he's looking at (using the _____), and then, upon recognizing the object (using the _____), you say, "It's a dolphin!"
a) orienting stream; ventral stream
b) ventral stream; dorsal stream
c) dorsal stream; ventral stream
d) ventral stream; semantic stream
e) orienting stream; semantic stream

15. What is the best definition of the interdisciplinary approach to psychological science?
a) working on multiple questions in the same scientific area of study
b) working on the same question across different scientific areas of study
c) working on the same questions at different points in time
d) working on a question by applying disciplined guidelines to the course of the inquiry
e) all of the above

16. An interpersonal level of analysis falls into which of the following categories for understanding behavior?
a) biological
b) perceptual
c) psychological
d) social
e) it falls into all of the above categories

17. A psychological scientist is investigating the underlying causes for book buying behavior. She has chosen to examine the ways in which the color and design of the cover affect choices by asking people what they think of when they see a particular cover. This investigation would likely involve all but which of the following levels of analysis?
a) genetic
b) interpersonal
c) cultural
d) perception and cognition
e) all of the above are likely levels of analysis for this phenomenon

18. The area of the brain that is primarily responsible for controlling one's impulses is the:
a) hypothalamus
b) self-regulatory cortex
c) pre-frontal cortex
d) amygdala
e) basal ganglia

19. The key function of lateral inhibition is to
a) help us see in the dark
b) help us recovery some functional abilities after brain injury by inhibiting the functions of the injured neural mass, and off-loading those functions to laterally adjacent areas of the brain
c) down-regulate neural connections if they have been activated too often
d) inhibit distracting stimuli, helping us to focus attention on the task at hand
e) help us emphasize visual contrasts and see the edges of objects

20. According to the dominant perspective on operant conditioning, championed by B.F. Skinner, what consequence is most effective in a wide variety of contexts in training an organism to learn a new behaviour?
a) untrained
b) reflexive
c) punishment
d) reward
e) this question is misleading; in fact, Skinner emphasized that different consequences are more or less effective, based on the underlying personality structure of the individual

21. The place in the brain that is absolutely vital to understanding how reason and emotion work together in the human mind, is
a) the nucleus accumbens (because this is where goal setting and reward both occur)
b) the prefrontal cortex (because this is where higher cognitive processes and many emotional processes both occur)
c) the hippocampus-amygdala (because the connection between these two areas gives us the ability to both store basic memories of our experiences, along with the emotional tone that went along with the experience.
d) the corpus collosum (because this is the conduit through which most of the brains' internal communications must occur.
e) none of the above

22. As you are galloping around the arena on your new horse, you tighten the reins before steering your horse over a jump. Your horse soon learns that every time the reins tighten, he should get ready to jump. This scenario of learning is an example of
a) skill-based conditioning.
b) operant conditioning
c) fight or flight theory.
d) classical conditioning
e) evolutionary selective pressures (because the speed with which the horse learned this information is indicative of its domestication by humans, which is easy to prove simply by comparing how quickly horses would learn such an association compared to other animals)

23. Being able to directly manipulate independent variables is essential in order to
a) describe behavior.
b) establish causal relationships.
c) test hypotheses.
d) design a study.
e) collect appropriate data

24. Modern scientific methodology assumes psychological phenomena
a) can be adequately studied *only* from a neuroscience level of analysis because it is the most rigorous.
b) can *best* be studied from a neuroscience level of analysis because it is the most rigorous.
c) can be studied at a variety of levels of analysis using a variety of methods.
d) can be studied only with appropriate subjective methods.
e) are best studied in terms of in-depth case studies of individuals or small groups

25. While studying the digestive system, Nobel Prize–winning scientist Ivan Pavlov discovered an important psychological principle of learning known as *classical conditioning.* His discovery is an example of
a) intentionality.
b) serendipity.
c) skepticism.
d) appetitiveness.
e) none of the above

26. A 1950s study by David Hubel and Torsten Wiesel on the activity of cats' nerve cells in brain areas associated with vision
a) led to the establishment of guidelines on the use of animals in research.
b) confirmed the expectations of the specificity of neural firing with regard to seeing lines.
c) led to the serendipitous discovery that only certain nerve cells respond to seeing lines and edges.
d) disproved all complex research on visual pathways.
e) all of the above are equally good answers

27. Using the "number of items in a list that are correctly recalled" as a definition of memory demonstrates what basic research process?
a) operationalization
b) stating the obvious
c) forming a hypothesis
d) establishing a control variable
e) establishing the appropriate level of analysis to take for the research

28. The _____ variable shows what happens when the _____ variable is manipulated.
a) experimental; control
b) control; experimental
c) dependent; independent
d) independent; dependent
e) none of the above

29. If you created a robot to have sensation but not perception then the robot could
a) react to light but not to taste, smell, or touch.
b) construct useful information but be unable to remember it.
c) understand what things were but be unable to respond to them.
d) detect external stimuli but be unable to process the sensations in order to 'make sense' of them
e) none of the above

30. Your roommate spends a great deal of time checking out attractive people on the internet. Which neurotransmitter is largely responsible for motivating your roommate to maintain this behaviour?
a) serotonin.
b) glutamate.
c) dopamine.
d) norepinepherine.
e) acetylcholene

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ANSWERS:

1) a
2) a
3) b
4) a
5) a
6) d
7) a
8) b
9) b
10 a
11 a
12 e
13 c
14 c
15 b
16 d
17 a
18 c
19 e
20 d
21 b
22 d
23 b
24 c
25 b
26 c
27 a
28 c
29 d
30 c

Good luck on the test!