## Chapter 2 - Research Methods <br> Study Guide - Complete this for extra credit for chapter 2

1. A theory is
A) a testable explanation for what has been observed.
B) an experimental supposition.
C) an unsupported opinion.
D) the opposite of a fact.
E) a statement that has not been supported with facts.
2. In an experiment, which variable is controlled by the experimenter and which is measured by the experimenter?
3. Why is it important to replicate studies?
4. Provide two examples of how a researcher can control for extraneous variables.
5. In an experiment, explain the difference between the population and the sample.
6. Explain why researchers have a tendency to prefer the experimental method over other types of research.
7. What is the big advantage of double- blind studies?
8. What is the purpose of Institutional Review Boards?
9. Why is it preferable to provide a Likert scale (0-5 from strongly agree to strongly disagree) to individuals taking a survey, rather than simply giving an option of agree or disagree?
10. What is an advantage to using the median when examining a set of data?
11. If there is a negative correlation between candy consumption and happiness, what would we expect to note in people who eat a lot of candy?
12. What does the correlation coefficient show? What is the range of possible values that it can take?
13. As it is nearly impossible to get a completely random sample from the population, how can we get the best representation while still being practical?
14. What does $\mathrm{p}<05$ mean?
15. A scientific study should begin with
A) a hypothesis.
B) data collection.
C) background reading.
D) risk/gain assessment.
E) a controlled test.
16. Which of the following could be an operational definition of "fear"?
A) an intense feeling of terror and dread when thinking about some threatening situation
B) moving away from a stimulus
C) a desire to avoid something
D) panic
E) moving toward a stimulus
17. In a experiment, the factor that is controlled by the experimenter is the
A) control group.
B) hypothesis.
C) dependent variable.
D) experimental group.
E) independent variable.
18. Which is the only form of research that can determine cause and effect?
A) a case study
B) an experimental study
C) a survey
D) a correlational study
E) a naturalistic observation
19. Random assignment of subjects to different experimental conditions is a method for controlling differences between
A) heredity and environment.
B) the dependent variable and the independent variable.
C) controls and extraneous variables.
D) the experimental group and the control group.
E) empirical data and subjective data.
20. In which kind of research does the scientist have the most control over variables that might affect the outcome of the study?
A) an experimental study
B) a naturalistic observation
C) a cohort- sequential study
D) a case study
E) a correlational study
21. Which one of the following correlations shows the strongest relationship between two
variables?
A) +0.4
B) -0.9
C) 0.05
D) +0.38
E) -0.7
22. Which one of the following is a good method for controlling expectancy bias?
A) joining a professional organization
B) doing a double- blind study
C) consulting the APA's "Ethical Principles of Psychologist and Code of Conduct"
D) performing a case study
E) clearly describing the intended results to the subjects
23. Which of the following correlation coefficients would a statistician know, at first glance, is a mistake?
A) -0.7
B) 0.0
C) -0.2
D) +1.1
E) +1.0
24. Which of the following is a measure of central tendency?
A) correlation
B) frequency distribution
C) mean
D) histogram
E) random sample
25. The simplest measure of variability is
A) mean.
B) range.
C) mode.
D) standard deviation.
E) median.
26. Most psychologists accept a difference between groups as "real," or significant, under which of the following conditions?
A) $p<3$
B) $p<1$
C) $\mathrm{p}<05$
D) $p<5$
E) $p=0$
