Examenation questions for 1st semester Experimental Psychology fall 2022

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1. Why do we need scientific methods?
2. How can commonsense psychology reduce objectivity when we gather data?
3. What are the characteristics of modern science?
4. What do we mean by objectivity? How does objectivity influence observation, measurement, and experimentation?
5. The Goals of Research in Psychology
6. Psychology experiment and a cause-and-effect relationship between antecedent conditions and behavior

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7. The roles of IRBs in the ethical conduct of research using human participants
8. The roles of the APA Guidelines in the ethical conduct of research using human participants
9. Understand scientific fraud and how to avoid plagiarism

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10. Basic versus Applied Research
11. The Setting: Laboratory versus Field Research
12. Quantitative versus Qualitative Research
13. Asking Empirical Questions
14. Alternatives to experimentation: nonexperimental designs
15. Archival study
16. Case studies

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17. Evaluating Measures: Reliability
18. Evaluating Measures: Validity
19. Reliability and Validity
20. Scales of Measurement
21. Hypothesis Testing: Type I and Type II Errors

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22. Essential Features of Experimental Research
23. Manipulated versus Subject Variables
24. The Validity of Experimental Research
25. ETHICS—Recruiting Participants
26. Threats to Internal Validity
27. Testing and Instrumentation
28. Solomon Four Group Design
29. Participant Problems

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30. Between-Subjects Designs
31. The Problem of Creating Equivalent Groups
32. Within-Subjects Designs
33. The Problem of Controlling Sequence Effects
34. Control Problems in Developmental Research

35. Problems with Biasing

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36. Experimental Design I: Single-Factor Designs
37. Single Factor—Two Levels
38. Single Factor—More Than Two Levels
39. Control Group Designs

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40. Experimental Design II: Factorial Designs
41. Factorial Essentials
42. Outcomes—Main Effects and Interactions
43. Varieties of Factorial Designs

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44. Correlational Research
45. Psychology's Two Disciplines
46. Correlation and Regression—The Basics
47. Interpreting Correlations
48. Using Correlations
49. Multivariate Analysis in correlational research

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50. Quasi-Experimental Designs: Beyond the Laboratory
51. Quasi-Experimental Designs
52. Program Evaluation

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53. Research in Psychology Began with Small *N*
54. Reasons for Small *N* Designs
55. The Experimental Analysis of Behavior
56. Operant Conditioning
57. Small *N* Designs in Applied Behavior Analysis
58. Case Study Designs

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59. Observational Research
60. Survey Research