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## BRAINWARE UNIVERSITY

Term End Examination 2024-2025

Programme – B.Sc.(PSY)-Hons-2023

Course Name – Basic Research in Psychology

Course Code - BPY30002

( Semester III )

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

### Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

- (i) Choose the best example of a null hypothesis.
  - a) There is a significant difference in IQ scores between males and females.
  - b) There is no significant difference in IQ scores between males and females.
  - c) Males have higher IQ scores than females.
  - d) IQ scores are unrelated to gender.
- (ii) Choose the type of hypothesis that predicts a specific outcome.
  - a) Null hypothesis
  - b) Alternative hypothesis
  - c) Descriptive hypothesis
  - d) Non-directional hypothesis
- (iii) Choose the purpose of a null hypothesis.
  - a) To predict an effect in an experiment
  - b) To provide a basis for comparison
  - c) To prove the research hypothesis
  - d) To make assumptions about the population
- (iv) Choose the best example of a non-directional hypothesis.
  - a) Exercising for 30 minutes a day will result in weight loss.
  - b) The amount of exercise is unrelated to weight loss.
  - c) Exercising more leads to greater weight loss.
  - d) Exercising for 30 minutes a day will result in weight gain.
- (v) Choose the stage in the research process where you develop a hypothesis.
  - a) After data analysis
  - b) Before defining the research problem
  - c) After conducting a literature review
  - d) After data collection
- (vi) Choose the purpose of a hypothesis in the research process.
  - a) To summarize existing research
  - b) To state the opinions of researcher
  - c) To provide a rationale for the study
  - d) To make testable predictions
- (vii) Identify the type of variable that can influence the relationship between the independent and dependent variables if not controlled.
  - a) Confounding Variable
  - b) Dependent Variable
  - c) Independent Variable
  - d) Moderator Variable

- (viii) Choose the most suitable method for measuring a dependent variable that involves emotions.
- Self-report scale
  - Behavioral observation
  - Physiological measure
  - All of these
- (ix) Identify the technique used to reduce practice effects in repeated measures designs.
- Random Assignment
  - Counterbalancing
  - Standardization
  - Control Group
- (x) Choose the most appropriate technique for measuring stress in a laboratory setting.
- Cortisol levels
  - Heart rate
  - Behavioral observation
  - All of these
- (xi) Identify the main purpose of sampling in psychological research.
- To increase the number of subjects
  - To save time and resources
  - To eliminate subject or participant
  - To include all individuals in the population
- (xii) Select the method of sampling that involves dividing the population into groups before sampling.
- Stratified sampling
  - Random sampling
  - Convenience sampling
  - Cluster sampling
- (xiii) Select the sampling method that works best when populations are geographically dispersed.
- Cluster sampling
  - Purposive sampling
  - Systematic sampling
  - Stratified sampling
- (xiv) Identify the characteristic that ensures a sample is a good representation of the population.
- Sample diversity
  - Larger sample size
  - Random selection
  - All of these
- (xv) Identify the requisite for external validity in research.
- Generalizability
  - Internal consistency
  - Random error
  - Variable control

### Group-B

(Short Answer Type Questions)

3 x 5=15

- Write what are the types of research problems? Give one example of each type of problem. (3)
- Describe the following IV- task variables, environmental variables and subject variable with examples. (3)
- Describe randomization as a technique of controlling EV. (3)
- Explain double sampling. (3)
- Write characteristics of good research hypothesis. (3)

OR

Write how to state a hypothesis?

(3)

### Group-C

(Long Answer Type Questions)

5 x 6=30

- Explain systematic sampling. (5)
- Differentiate between research method and research methodology. (5)
- Explain pilot experiment. (5)
- Illustrate the steps to prepare a research proposal. (5)
- Describe counterbalancing as a technique of controlling EV. (5)
- Explain Ex post-facto research. (5)

OR

Explain ethnographic studies.

(5)