



BRAINWARE UNIVERSITY

Term End Examination 2023-2024

Programme – B.Sc.(PSY)-Hons-2022

Course Name – Statistics and Research Methodology-II

Course Code - PSYC302

(Semester III)

LIBRARY
Brainware University
Berasat, Kolkata -700125

LIBRARY
Brainware University
Berasat, Kolkata -700125

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 correct statement about a null hypothesis.

- | | |
|---|--|
| a) It is the same as an alternative hypothesis. | b) It is usually the focus of the study. |
| c) It predicts a specific relationship between variables. | d) It is tested to determine if there is a significant effect. |

(ii) Choose the component that follows the formulation of a research hypothesis.

- | | |
|--------------------|----------------------|
| a) Data analysis | b) Literature review |
| c) Data collection | d) Experimentation |

(iii) Choose the error that occurs when a null hypothesis is incorrectly rejected when it is actually true:

- | | |
|-----------------|------------------|
| a) Type I error | b) Type II error |
| c) Neither | d) Both |

(iv) Choose the best definition of a research problem.

- | | |
|--|--|
| a) A well-defined solution to a psychological question | b) A question that can be easily answered without research |
| c) An area of study that requires investigation or inquiry | d) A hypothesis that has been proven |

(v) Choose the characteristic of a good research problem.

- | | |
|--|---|
| a) It is based solely on personal opinion. | b) It is overly complex and hard to understand. |
| c) It is specific and researchable. | d) It is not influenced by existing research. |

(vi) Identify whether Spearman-Brown's formula is used for adjusting split half correlation?

- | | |
|-----------------|------------------|
| a) False | b) None of these |
| c) All of these | d) True |

(vii) Identify the primary goal of thematic analysis in qualitative data analysis:

- | | |
|--|--|
| a) Quantifying data | b) Generating statistical correlations |
| c) Identifying and analyzing patterns and themes | d) Testing hypotheses |

- (viii) Choose the correct option for the following sentence- Results can not be generalized to another situation or population in external validity.
- a) False
b) True
c) All of these
d) None of these
- (ix) Choose the correct order of the following general steps of test construction : 1- Reliability of the final test. 2- Validity of the final test. 3-Preparation of manual and reproduction of the test. 4-Planning of the test. 5-Preliminary administration of the test. 6- Writing items of the test. 7- preparation of norms for the final test.
- a) 2-4-7-1-3-6-5
b) 4-6-5-1-2-7-3
c) 3-1-5-7-6-2-4
d) 5-6-2-1-3-4-7
- (x) For achieving experimental try-out, identify who recommended at least three preliminary administrations of the test?
- a) Thiago William
b) Miles Rodriguez
c) John Watson
d) Conrad
- (xi) Identify the external consistency procedure of reliability-
- a) Split half reliability
b) Richardson estimate of reliability
c) Cronbach's alpha
d) Test re-test reliability
- (xii) Identify the main objective of content analysis in qualitative data analysis:
- a) Measuring statistical significance
b) Identifying and analyzing patterns in textual or visual data
c) Conducting experiments
d) Generating quantitative data
- (xiii) Select the appropriate type of data that content analysis is best suited for:
- a) Numerical data
b) Qualitative data
c) Survey responses
d) Hypothesis testing data
- (xiv) Choose the stage in research where you make predictions about the relationship between variables.
- a) After data collection
b) Before defining the research problem
c) After conducting a literature review
d) After data analysis
- (xv) Choose the correct definition of a hypothesis in psychology.
- a) A proven fact
b) A tentative statement that can be tested
c) An established theory
d) A subjective opinion

Group-B

(Short Answer Type Questions)

3 x 5=15

2. Explain Yate's correction and mention the conditions require to apply Yate's correction. (3)
3. Describe the threats to internal validity. (3)
4. Classify and discuss the methods of estimating reliability. (3)
5. Describe causal hypothesis and descriptive hypothesis. (3)
6. Write the ways in which problem is manifested? (3)

OR

Write what are the types of problems? Give one example of each type of problem. (3)

Group-C

(Long Answer Type Questions)

5 x 6=30

7. Explain in detail the type I & type II errors with example. (5)
8. Explain data verification and validation strategies used in qualitative research approaches. (5)
9. Explain how to evaluate web documents? (5)
10. Write about the basic principles of research design? Explain them. (5)
11. Compute the SE of the mean using the following frequency distribution of body heights (cm). (5)

Class intervals:	156-160	161-165	166-170	171-175	176-180
Frequencies:	4	14	25	11	6

12. Explain thematic analysis in detail. (5)

OR

Explain narrative analysis. (5)

LIBRARY
Brainware University
Barasat, Kolkata -700125

LIBRARY
 Brainware University
 Barasat, Kolkata - 700125