

Swami Vivekananda Yoga Anusandhana Samsthana (S-VYASA)
A Deemed to be University established under Section 3 of the UGC Act, 1956

Program: BSc (Yoga Therapy)
Subject Name: Research Methodology & Statistics
Sem Period: March, 2024 – July, 2024
Date: 23.07.2024
Examination Mode: Back Paper

Semester: 5th Semester
Subject Code: BSYTT 503
Batch: September, 2021
Time: 09.45 am to 12.45 pm
Max. Marks: 100

General Instructions:

1. Read all the questions carefully and then start writing
2. Do not write anything on the question paper
3. Write your registration number on the rectangular space provided here

Reg No:

Objective Types (Attempt All) – 1 Mark for each Question

10 *01 =10 Marks

1. All individuals defined by the research problem is called
 - a) Sample
 - b) Data
 - c) Population
 - d) None of the above
2. A summary of statistics that represents the central tendency or value of data set is known as
 - a) Mean
 - b) Median
 - c) Mode
 - d) All the above
3. Main objective of Institutional Ethics Committee to check
 - a) The research should never harm a person
 - b) Each participant has a right to privacy
 - c) Confidentiality of the data
 - d) All the above
4. Random sampling is when every individual in the population has
 - a) None of the below
 - b) Being chosen from a equal distance
 - c) Being chosen whatever way they are available
 - d) An equal chance of being in the sample
5. A set of procedures by which a research study is conducted is called as
 - a) Assessment
 - b) Intervention
 - c) Design
 - d) Sampling
6. Controlled group condition is applied in
 - a) Survey Research
 - b) Historical Research
 - c) Experimental Research
 - d) Descriptive Research
7. Which of the following is not a part of IRB member?
 - a) Researcher
 - b) Lawyer
 - c) Scientist
 - d) Clinician
8. A measure of dispersal which indicates how much the values differ from the mean value is called
 - a) Mean
 - b) Median
 - c) Mode
 - d) Standard deviation

9. Which of the following test is used for within group and non-parametric test?

- a) Spearman's correlation
- b) Friedman's test
- c) Wilcoxon's sign rank test
- d) Kruskal Wallis test

10. Which one of the following is a not a non-parametric test?

- a) Wilcoxon signed rank test
- b) Independent sample t-test
- c) Spearman's correlation
- d) Man Whitney U test

Short Notes (Attempt any Ten) – 2 Marks for each Question

10 *02 =20 Marks

- 11. Median
- 12. Abstract
- 13. Characteristics of a good research question
- 14. Scales
- 15. Normal Distribution
- 16. Ancient literature review
- 17. Histogram
- 18. Reliability
- 19. Independent Sample 't' test
- 20. IEC
- 21. Blinding
- 22. Variables

Short Essay (Attempt any Six) – 5 Marks for each Question

06 *05 =30 Marks

- 23. Applied vs Fundamental research
- 24. Hypothesis vs Null-hypothesis
- 25. Ordinal vs Ratio data
- 26. Cohort vs Cross-sectional design
- 27. Prospective vs retrospective design
- 28. Histogram vs Pie chart
- 29. Reliability vs Validity.

Long Essay: (Attempt any Four) – 10 Marks for each Question

04* 10 =40 Marks

- 30. Describe the classification of Research Types with examples
- 31. Explain four sampling methods with examples.
- 32. Explain parametric and non-parametric tests in details.
- 33. Arrange the following data into a frequency table and calculate the mean, median, mode and standard deviation
{2,2,2,2,2,2,4,4,4,4,4,4,4,3,3,3,3,3,3,3,3,3,3,5,5,5,5,5,5,5,5,5,5,5,6,6,,6,6,6,8,6,6,6,6,6,7,7,7,7,7,7,7,7,9,9,9,9,1,10,10,10}

34. Draw a Histogram and calculate the median and standard deviation of the following data.

Class	Frequency
10-20	4
20-30	3
30-40	5
40-50	7
50-60	6
60-70	2