# SWAMI VIVEKĀNANDA YOGA ANUSANDHĀNA SAMSTHĀNA

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### MS T 104 Research Methodology 1

DATE: 31.05.2012

Time: 3 Hours (10 AM – 1 PM)

Max. Marks: 100

#### Q1. Answer any five:

5X10=50

- 1. What are the sampling methods and explain them?
- 2. What are types of design? Explain each of them?
- 3. Prepared a synopsis by making your own choice of hypothesis.
- 4. How do you analize the data? Write the statisctical name of Parametric and Non-Parametric test and its application in types of design.
- 5. Calculate the Mean. Mode, Median. SD and Range for 9, 6, 12, 9, 15, 20, 22, and 24.
- 6. An experimentor measured 10 subjects Systolic Blood pressure before and after Nadisudhi pranayama? The values are given in the table.
- (i) State the null and alternate hypothesis.
- (ii) Find the critical values.
- (iii) Sketch the acceptance and rejection region.
- (iv) Decide whether you should accept or reject the null hypothesis.

# Table values of 't' at 9 degree of fredom is 2.262 at alph =0.05.

| Before |     |     |     |     |     |     |     |     |     |     |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| After  | 105 | 103 | 103 | 103 | 108 | 110 | 101 | 106 | 109 | 106 |

#### Q.2. Write short notes on:

5X5=25

- a. Literature review
- b. Types Variable
- c. Hypothesis
- d. Types measurement
- e. Abstract

## Q.3. Answer in one or two lines.

2X5=10

- a. Validity
- b. IRB
- c. Placebod. Reliability
- e. Population

| Λ                                | В                     |  |  |  |
|----------------------------------|-----------------------|--|--|--|
| a. Height                        | 1. Paired "t" test    |  |  |  |
| b. Kruskal-wallis                | 2. Interval data      |  |  |  |
| c. Pre-post design               | 3. Ratio data         |  |  |  |
| d. Bias                          | 4. Nonparametric test |  |  |  |
| e. Temperature in <sup>0</sup> F | 5. Randomization      |  |  |  |

# Q.5. Fill in the blanks

10

| 1. | Examination grade comes undertype of data.                            |  |  |  |  |  |
|----|---|--|--|--|--|--|
| 2. | The small part of the entire population is called                     |  |  |  |  |  |
|    | Harmless pill used instead of original drug is called                 |  |  |  |  |  |
|    | used to reduce the influence confounding variables.                   |  |  |  |  |  |
|    |   |  |  |  |  |  |
| 6. | type of sampling is where every person / member of the population has |  |  |  |  |  |
|    | equal chance of selection.  |  |  |  |  |  |
| 7. | Data collected before experiment start is callled                     |  |  |  |  |  |
| 8. | Guna personality measured byinstruments.                              |  |  |  |  |  |
|    | The most frequently occurred values are called                        |  |  |  |  |  |
| 10 | is the unit of weight   |  |  |  |  |  |