LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

**M.Com.** DEGREE EXAMINATION - **COMMERCE**

**QB 23**

THIRD SEMESTER – November 2008

# CO 3804 - RESEARCH METHODOLOGY

Date : 07-11-08 Dept. No. Max. : 100 Marks

Time : 9:00 - 12:00

**PART-A**

**Answer ALL questions. (10 x 2 = 20 marks)**

1. Illustrate the objectives of Research

2. Define the Social Science Research

3. How do you form a Problem in Research?

4. Discuss limitations of Descriptive Research

5. Variables – Explain.

6. Classify the different types of Research design

7. What are the different types of Scaling?

8. Write a short note on Non parametric test.

9. Explain the term correlation.

10. What do you mean by Chi – Square?

**PART - B**

**Answer any FIVE questions (8 x 5 = 40 marks)**

11. What is a Research process? Explain the various stages of Research

12. What are the merits and demerits of Case study approach?

13. Distinguish between Structured and unstructured Interview.

14. What are the Merits and demerits of stratified sampling?

15. Calculate Spearman’s coefficient of correlation between marks assigned

to ten students by judges X and Y in a certain competitive test as

shown below:

S.No.: 1 2 3 4 5 6 7 8 9 10

Marks by judge X: 52 53 42 60 45 41 37 38 25 27

Marks by judge Y: 65 68 43 38 77 48 35 35 25 50

16. The figures given below are (a) the observed frequencies of a distribution, and (b) the

frequencies of the normal distribution having the same mean, Standard Deviation and the total

frequency as in (a).

(a) 1 5 20 28 42 22 15 5 2

(b) 1 6 18 25 40 25 18 6 1

Apply the X2 test of goodness of fit at 5% level of significance.

H0: A normal distribution is a good description of the observed frequencies

H1: A normal distribution is a not a good description. (Table Value = 9.49)

17. 1,000 individuals are exposed to a lecture on U.S.A – Iraq war and their response counted both

before and after the lecture:

**Before Lecture**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | No. Who favoured war | No. who disfavoured war | Total |
| After | No. who favoured | 300 | 100 | 400 |
| Lecture | No. who disfavoured | 300 | 300 | 600 |
| Total | | 600 | 400 | 1,000 |

Test at 5% level of significance whether there has been a significant change in people’s attitude towards war. Use McNemar test. (Table Value = 3.84)

18. For nine animals, tested under control conditions and experimental conditions, the

following values of a measured variable were observed:

Animal No. 1 2 3 4 5 6 7 8 9

Control 21 24 26 32 55 82 46 55 88

Experimental 18 9 23 26 82 199 42 30 62

Test Whether a significant difference exists between the medians, using the Wilcoxon

Signed Rank Test.

Let us first write the null and alternative hypotheses as under:

Ho : There is no significant difference between the median values of control and

experimental conditions.

Ho : There is significant difference between the median values of control and experimental

conditions. Table Value N= 9 is 6.

**PART-C**

**Answer any TWO questions (2 x 20 = 40 marks)**

19. Discuss various approaches to research. Explain the factors that determine the selection of

a suitable approach.

20. Discuss the meaning and importance of scaling techniques in research. With a suitable

example for each explain Likert and Thurstone scaling techniques.

21. A tea company appoints four salesmen A, B, C and D and observes their sales in three

seasons—summer, winter and monsoon. The figures (in lakhs) are given in the following

table using coding methods Rs. 30 lakhs.

Salesmen

Seasons ------------------------------------------------------------ Season’s

A B C D Total

Summer 36 36 21 35 128

Winter 28 29 31 32 120

Monsoon 26 28 29 29 112

Salesmen’s Totals 90 93 81 96 360

(i) Do the salesmen significantly differ in performance? Table Value= 1.619

(ii) Is there significant difference between the seasons? Table Value= 1.417

\*\*\*\*\*\*\*\*\*\*\*\*\*\*