LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

THIRD SEMESTER – NOVEMBER 2010

# CO 3804 - RESEARCH METHODOLOGY

Date : 03-11-10 Dept. No. Max. : 100 Marks

Time : 9:00 - 12:00

**SECTION-A**

(Answer ALL questions) (10x2=20)

1. What is research?

2. What do you understand by objectivity in research?

3. Who should suggest the research topic? State the reasons for your answer.

4. What is case study?

5. What is meant by an operational design?

6. Should all researches need to have a hypothesis statement?

7. List out the prerequisites of thesis writing.

8. State some benefits of using encyclopedias in research.

9. A study of railway reservations is made for 10 days in the winter season to know if the number of daily reservations is uniform or not. From the following results, find out whether the distribution is uniform.(Apply chi- square test –Table value at 5% significance level is 16.919)

|  |
| --- |
| Days 1 2 3 4 5 6 7 8 9 10 |
| No. of  Reservations 65 80 100 98 75 80 82 70 60 90 |

10. 1,000 individuals are exposed to a lecture on U.S.A – Iraq war and their responses were

counted before and after the lecture.(Table value = 3.84)

Before lecture

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | Number who favoured war | Number who disfavoured war | Total |
| After  Lecture | Number who favoured  Number who disfavoured | 300  300A | 100B  300 | 400  600 |
| TOTAL |  | 600 | 400 | 1,000 |

Test at 5% level of significance whether there has been a significant change in the attitude of

the people towards the war.( Use McNemer test)

**SECTION -B**

(Answer any FIVE questions) (5x8=40) 11. Briefly explain the objectives of research.

12. List out and explain the types of research design.

13. Write short notes on the following:

a) Summated rating scale b) Ratio scale c) Nominal scale d) Ordinal scale.

14. What is hypothesis? What are the characteristics of a hypothesis statement?

15. Write a brief note on observation technique.

16. What is a questionnaire? What are the types of questionnaire?

17. Two groups of high school students of, each containing 8 members, earn the following scores:

|  |
| --- |
| A 19 28 14 23 14 17 12 15 |
| B 25 23 29 15 27 21 24 20 |

Do the two groups differ significantly? Apply the sum of Ranks Test. (Table value at 5% significance

Level: Z= (+) or( –) 1.96)

18. The observed cumulative frequencies ( F*o* ) corresponding to given values of X (Upper class

boundaries) in a sampling experiment, are shown in the following table. The theoretical cumulative

frequencies ( F*e* ) from a certain normal population are given below.

|  |  |  |
| --- | --- | --- |
| Upper Class  Boundary (X) | F*o* | F*e* |
| 20.5  22.5  24.5  26.5  28.5  30.5  32.5  34.5  36.5  38.5  40.5 | 2  9  24  73  162  300  402  469  505  510  511 | 0.6  4.5  20.9  68.5  161.7  287.6  401.4  471.5  500.8  509.2  511.0 |

Use the Kolmogrorov-Smirnov test at 1% level of significance to show that it is reasonable To accept the hypothesis that the population sampled had the normal distribution corresponding to the column *Fe.*

**SECTION-C**

(Answer any TWO questions) (2x20=40)

19. Describe the various steps involved in the research process.

20. Discuss in detail the guidelines to be followed while conducting an interview.

21. Mercy Tea Store has three shops at three locations in the city. The owner keeps a daily record for each location of the three number of customers who actually make a purchase. A sample of the data is as follows. Using the Kruskal-wallis test, Can you say at 5% level of significance that the shops have the same number of customers who buy?(Table value =5.991)

|  |  |  |
| --- | --- | --- |
| Location-A | Location-B | Location-C |
| 99  64  101  85  79  88  97  95  90  100 | 83  102  125  61  91  96  94  89  93  75 | 89  98  56  105  87  90  87  101  76  89 |

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