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 |
|  AfterLecture | Number who favouredNumber 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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