

II Semester M.Com. Examination, November/December 2022 (CBCS Scheme) (2021 – 22) COMMERCE

2.3 : Advanced Research Methodology

Time: 3 Hours

Max. Marks: 70

Instruction: Answer all the questions as per instructions.

SECTION - A

Answer any seven questions out of ten. Each question carries two marks. (7×2=14)

- 1. a) What is action research?
 - b) What is the Delphi method?
 - c) What is a Likert scale?
 - d) What is structured interview?
 - e) What are sampling errors ?
 - f) What are double-barreled questions?
 - g) What is projective technique?
 - h) Give the meaning of sampling.
 - i) What is cluster sampling?
 - j) What is editing of data?

SECTION - B

Answer any four questions out of six. Each question carries five marks. (4×5=20)

- 2. What do you mean by 'parametric' test? When do you use it?
- 3. Bring out the importance of review of literature.
- Describe the precautions that the researcher should take while interpreting the findings.



5. The following table gives the classification of 100 workers according to gender and the nature of work. Test whether nature of work is independent of the gender of the worker at 5% level of significance.

DA 1 8.5

	Skilled	Unskilled	Total
Male	35	25	60
Female	15	25	40
Total	50	50	100

(Given: table value of χ^2 at DF = 1 and 5% level of significance is 3.84)

6. The mean weekly sale of soap bars in departmental stores was 146.3 bats per store. After an advertising campaign, the mean weekly sales in 22 stores for a typical week increased to 153.7 and showed a standard deviation of 17.2. Was the advertising campaign successful?

(Given: table value for t for DF = 21 at 5% level of significance is 1.72)

7. Memory capacity of 9 students was tested before and after training. State at 5% level of significance whether the training was effective from the following scores:

Students	1	2	3	4	5	6	7	8	9
Before	10	15	9	3	7	12	16	17	4
After	12	17	8	5	6	11	18	20	3

Using paired sample t test.

(Given : table value (DF = 8) at 5% level of significance = 1.860)

SECTION - C

Answer any two questions out of four. Each question carries twelve marks. (2x12=24)

8. An aptitude test was applied on 6 girls in Music Training Class and 10 girls in a Language Class. Is the mean difference between the two groups significant? Write a null hypothesis and test it:

Scores in Music Class : 24 28 35 32 26 36

Scores in Language Class: 20 12 24 34 21 28 31 24 27 15

[Values of "t at .05 level: df 13: 1.771; df 14: 1.761; df 15: 1.753 and df 16: 1.7461]

9. Explain the meaning and significance of a research design.



10. Four machines A, B, C and D are used to produce a certain kind of cotton fabrics. Sample of size 4 each unit as 1000 square meters are selected from the outputs of the machines at random and the number of flaws in each 100 square meters are counted with the following result:

A	В	C	D
11	7	12	16
9	9	11	20
14	10	18	23
16	4	9	21

Test, is there any significant difference in the performance of the four machines at 5% level of significance ?

(Given: table value at 5% level of significance for V1-3 and V2-12 is 3.49)

Briefly explain the tools used to analyse data.

SECTION - D

Answer the following question.

 $(1 \times 12 = 12)$

12. Just a few years ago, Tom Oliver, the Chief Executive of Holiday Hospitality Corp., was struggling to differentiate among the variety of facilities offered to clients under the Holiday flagship – the Holiday Inn Select designed for business travelers, the Holiday Inn Express used by penny pinchers and the Crowne Plaza Hotels, the luxurious hotels meant for the big spenders. Oliver felt that revenues could be quadrupled if only clients could differentiate among these. Keen on developing a viable strategy for Holiday Hospitality, which suffered from brand confusion, Tom Oliver conducted a customer survey of those who had used each type of facility and found the following. The consumers didn't have a clue as to the differences among the three different types. Many complained that the buildings were old and not properly maintained and the quality ratings of service and other factors were also poor. Furthermore, when word spread that one of the contemplated strategies of Oliver was a name change to differentiate the three facilities, irate franchises balked. Their mixed messages did not help consumers to understand the differences, either.

Oliver thought that he first needed to understand how the different classifications would be important to the several classes of clients and then he could market the heck out of them and greatly enhances the revenues. Simultaneously, he recognized that unless the franchise owners fully co-operated with him in all his plans, mere face lifting and improvement of customer service would not bring added revenues.

- a) Identify the problem.
- · b) Develop a theoretical framework.
 - c) Develop atleast four hypothesis.