

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**M.Com. DEGREE EXAMINATION – COMMERCE****THIRD SEMESTER – NOVEMBER 2023****PCO3MC02 – BUSINESS RESEARCH METHODS**

Date: 01-11-2023

Dept. No.

Max. : 100 Marks

Time: 01:00 PM - 04:00 PM

SECTION A – K1 (CO1)**Answer ALL the questions****(5 x 1 = 5)****1 Fill in the blanks**

- a) N indicates Universe, whereas n indicates ____.
- b) A ____ is a definite plan for obtaining a sample from a given population.
- c) Quizzes and tests are used to collect ____ data.
- d) ____ is used as an abbreviation in citations to indicate 'and others'.
- e) The purpose of an extensive review of literature is to identify the ____.

SECTION A – K2 (CO1)**Answer ALL the questions****(5 x 1 = 5)****2 State True or False**

- a) Chi-square test is a Parametric Test.
- b) Nominal Scale is the most powerful level of measurement.
- c) F-Test is employed to assess the equality of variance between 2 populations.
- d) Type I Error: The hypothesis is false but our test accepts it.
- e) H-Test is also called as Sign Test.

SECTION B – K3 (CO2)**Answer any THREE of the following Questions.****(3 x 10 = 30)**

- 3 What are the techniques involved in defining a Research Problem?
- 4 Distinguish between Dependent and Independent variables with suitable examples.
- 5 Highlight the significance of SPSS in research.

6 Calculate Karl Pearson Co-efficient of Correlation from the following data:

X	9	8	7	6	5	4	3	2	1
Y	15	16	14	13	11	12	10	8	9

7 Calculate the Rank Correlation of top stocks in NSE & BSE:

Stocks	A	B	C	D	E	F	G	H	I	J
NSE	8	7	6	3	2	1	4	9	10	5
BSE	10	8	5	2	1	3	6	9	7	4

SECTION C – K4 (CO3)**Answer any TWO of the following Questions:****(2 x 12.5 = 25)**

- 8 Explain illustratively, any five types of research widely used in Social Sciences.
- 9 Analyse the problems encountered by the Researchers in India.
- 10 Runs scored in IPL by the All-rounders in three teams during the year 2022-23 are given below:

Team A: 280, 283, 279, 285, 290, 268
Team B: 282, 284, 260, 272, 286, 267, 291
Team C: 293, 265, 277, 278, 288
Using the Kruskal-Wallis H Test, to determine at 0.05 level of significance, whether the three teams are equally effective in terms of performance of the IPL All-rounders.
(Given for χ^2 , $\chi^2_{0.05}=5.991$)

11 Loyola College Management seeks your opinion to check whether there is a difference between the number of absentees in the School of Commerce, before and after Mentoring. Use the sign test @ 5 % level of significance and comment.

Before	120	118	134	135	170	112	123	128	114	145	178	127	125	161	166
After	132	129	113	122	127	173	190	151	157	124	127	183	190	128	166

SECTION D – K5 (CO4)

Answer any ONE of the following Questions: (1 x 15 = 15)

12 Elucidate the layout of a Research Report and narrate the steps involved in writing it.

13 Chennai Readymade Stores is interested in knowing the demand for four Shirt brands during three festival seasons based on the 2022 turnover. The figures in ‘000 are given in the following table:

FESTIVAL SEASONS	Shirt Brands			
	LP	VH	CP	BB
New Year	538	540	541	539
Pongal	545	542	549	536
Diwali	540	538	542	542

You are required to perform ANOVA and ascertain, whether there is any significant difference between Shirt Brands and Festival Seasons.
(Given, $v_1=3$ and $v_2=6$ d.f $F_{(0.05)} = 4.76$ & $v_1=2$ and $v_2=6$ d.f $F_{(0.05)} = 5.14$)

SECTION E – K6 (CO5)

Answer any ONE of the following Questions: (1 x 20 = 20)

14 The given data represents the shelf life (in days) based on a Sample Survey of four different health drinks. Using ANOVA, ascertain at 5% level of significance (Given $F_{0.05}=3.24$), is there evidence of a difference in the average shelf life of the four health drinks.

Health Drink A	Health Drink B	Health Drink C	Health Drink D
199	202	202	197
201	197	200	201
199	202	200	200
200	202	200	201
202	200	198	199

15 From the First Generation IT Professionals of seven major cities in South India, random samples were taken and stated below. Can it be said that there is a significant variation among the First generation IT Professionals in select major cities in the tendency to buy a house?

Cities	A	B	C	D	E	F	G
Independent House	170	285	165	106	153	125	146
Flats	40	125	35	37	55	35	33

(Given for $v=6$ $\chi^2_{0.05}=12.6$)

&&&&&&&&&&