Institute of Management Studies(IMS)

DAVV, Indore

M.B.A.(FA)-IInd Sem.-2024

Research Methodology

Date: 24/04/24

Max. Marks:60

Time:3 hr(11:00 A.M.-2:00 P.M.)

Note: Attempt any five questions. Each question carries equal marks.

- <u>Ouestion-1:</u> (a) Define Research process and Explain various steps in research process.
 - (b) "Research is much concerned with proper fact-finding analysis and evaluation". Do you agree with this statement- Justify.
- <u>Ouestion-2:</u> (a) Explain the necessity of defining a Research Problem. What aspects must be specified in a problem definition if it is to be completed?
 - (b) What is Hypothesis? Discuss the steps involved in hypothesis testing
- Question-3: Use a chi-square test to determine whether there is a relationship between gender and getting in trouble at school (given that the critical statistic for an alpha level of 0.05 and one degree of freedom is 3.841)

Table: Gender and Getting in Trouble at School

Got in Trouble		Did Not Get in Trouble	Total
Boys	46	71	117
Girls	37	83	120
Total	83	154	237

PTO

Question-4:

Solve using Two-way ANOVA method

Observation	Α	В	С	D	E	F
1	1200	1000	980	900	750	800
2	1000	1100	700	800	500	700
3	890	650	1100	900	400	350

<u>Question-5:</u> Suppose you start up a company that has developed a drug that is supposed to increase IQ. You know that the standard deviation of IQ in the general population is 15. You test your drug on 36 patients and obtain a mean IQ of 97.65. Using an alpha value of 0.05, is this IQ significantly different than the population mean of 100?

<u>Question-6</u>: Discuss Interval and Ratio scales? What statistical techniques can be used with these scales explain with suitable examples.

<u>Ouestion-7:</u> (a) "A research report contains excessive information is not a good report." Comment

(b) "Skills required for writing a good report are quite different from those required for conducting a good research." Comment

Question-8: Write the short note (any two)

- (a) Data collection methods
- (b) Factor Analysis
- (c) Questionnaire Design
- (d) Steps involved in sampling process
- (e) Discriminant Analysis