

Institute of Management Studies(IMS)

DAVV, Indore

M.B.A.(FA)-IInd Sem.-2023

Business Research Methods

Date: 31/05/23

Max. Marks:60

Time:3 hr

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

Question-1: "Differentiate between Management problem and Research problem. Define the main issues which should receive the attention of the researcher in formulating the research problem. Give suitable examples to elucidate your points.

Question-2: (a) Distinguish between cross-sectional and longitudinal studies.

(b) Explain different types of informal research design with suitable examples.

Question-3: : A firm has four types of machines-A,B,C and D. It has put four of its workers on each of its machines for a specified period. After the expiry of this period, it has calculated the average output for each worker on each type of machine. These data are given below

Worker	Average production by the type of machine			
	A	B	C	D
1	25	26	23	28
2	23	22	24	27
3	27	30	26	32
4	29	34	27	33

The firm is interested to find out (a) whether the mean productivities of workers are significantly different and (b) whether there is a significant difference in the mean productivity of the different machine types.

Question-4: the Educational Testing service conducted a study to investigate difference between the scores of female and male students on the Mathematics aptitude Test. The study identified a random sample of 562 female and 852 male students who had achieved the same high score on the *mathematics* portion of the test. That is, the female and male students viewed as having similar high ability in mathematics. The verbal scores for the two samples are given below:

	Female	Male
Sample mean	547	525
Sample standard deviation	83	78

Do the data support the conclusion that given populations of female and male students with similar high ability in mathematics, the female students will have a significantly high verbal ability? Test at $\alpha = .05$ significance level. What is your conclusion? (z table value at 5% is +1.645)

Question-5: Two research workers classified some people in income groups on the basis of sampling studies. Their results are as follows:

Investigators	Income groups			Total
	Poor	Middle	Rich	
A	160	30	10	200
B	140	120	40	300
Total	300	150	50	500

Show that the sampling technique of at least one research workers is defective. (the table value of chi-square for two degree of freedom at 5% level of significance is 5.991)

Question-6 : Differentiate between Probability sampling and Non-Probability sampling. Explain with suitable examples Probability sampling and Non-Probability sampling techniques.

Question-7: Differentiate between oral and written reports. Describe the various steps involved in preparation of the report.

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

- Type I and Type II errors
- Primary sources of data collection
- Questionnaire
- Sampling and Non-Sampling errors