

MBA II Year Examination

MP-202 : Research Methodology

Time: 3 Hours

Max. Marks: 80

Note: The question paper is divided into three sections A, B & C. Write Answers as per the given instructions.

Section A

(Very Short Answer Type Questions)

Note: Answers all 8 questions. As per the nature of the questions you delimit your answer in one sentence up to 50 words. Each question carries equal marks. (Marks 2x8=16)

1. Define Research.
2. What is Applied Research?
3. What do you mean by Cohort Analysis?
4. Give the meaning of Causal Research.
5. What is sampling?
6. What is multi-stage sampling?
7. M.S. Dhoni wearing the T-shirt numbered 6. Which type of scale it reflects?
8. A brand of cosmetics 'X' is being ranked as 3rd and 'Y' as 1st. Thus it can be deduced that 'Y' is two times better than 'X'. Explain.
9. What is focused interview?
10. Why do you edit the data?
11. What is Pie Chart?
12. Which measure of central tendency is appropriate in any of the four scales of measurement.
13. What is the empirical relation between Mean, Median and Mode?
14. What is Skewness?
15. What are the limitations of Observation Methods?
16. What is Hypothesis?
17. What do you mean by Null Hypothesis and Alternative Hypothesis?
18. What is universe?
19. Define Chi-square Test (X^2 Test).
20. What is degree of freedom?

21. What is X^2 test of goodness of fit?
22. Mention the fields in which ANOVA is extremely useful.
23. Define Field Surveys.
24. Mention advantages of computers in business research.
25. What is research report?

Section B

(Short Answer Type Questions)

Answer any 4 questions. Each answer should not exceed 100 words. Each question carries 08 marks. (Marks 8x4 = 32)

1. Differentiate between Exploratory research and descriptive research.
2. Define Cross Sectional Study. What are its two types?
3. Explain Pilot Study.
4. Define focus group along with the characteristics a moderator should possess while conducting research with it.
5. What are the sources available for data collection at exploratory stage?
6. How do you select a method to study consumer behavior?
7. Differentiate between quota sampling and cluster sampling.
8. Discuss some measurement errors.
9. Give short notes on Likert scale and Semantic Differential scale.
10. Differentiate between Primary and Secondary Data with examples.
11. Explain coding with examples.
12. Which of the following distributions is bimodal?
 - a) 10, 12, 9, 11, 14, 9, 16, 9, 13, 20.
 - b) 21, 17, 6, 19, 23, 19, 12, 19, 16, 7.
 - c) 14, 18, 16, 28, 14, 14, 17, 18, 18, 6.
13. Give the meaning of Critical Region and Region of Acceptance.
14. Explain : a) Type I and Type II errors
 - b) One-tailed and two-tailed tests

15. A sample of 400 students is found to have a mean height 171.38cms.

Can it be reasonably regarded as a sample from a large population of mean height 171.17cms. and standard deviation of 3.30 cms.? Consider the critical value of z at 5% significant level is 1.96.

16. Attitudinal test given to two groups of males and females gave the following information:

	Mean Score	S.D.	Number
Males	70	12	100
Females	75	10	50

Is the difference in the Mean Scores of Males and females statistically significant at 5% or 1% level of significance?

17. A random sample of 27 pairs of observations from a normal population gave a correlation coefficient of 0.6. Is this significant .

18. Mention the conditions to be satisfied for the application of Chi-Square Test.

19. Give the steps involved in One-Way Anova.

20. Define contingency table. Describe the use of X^2 distribution in it.

21. What do you mean by Yate's correction? Mention the situations in which it is applied.

22. Explain the Inductive and Deductive Qualitative Surveys.

23. Differentiate between Correlation and Regression.

24. Define Correlation. How many types of correlation are there?

25. Ten students secured following marks out of 100 in Accounts and Marketing.

Accounts	15	13	27	45	20	60	20	75	20	75
Marketing	50	30	55	25	30	10	30	70	10	55

Calculate the rank correlation coefficient.

Section C

(Long Answer Type Questions)

Answer any 2 questions. Each answer should not exceed 800 words. Each question carries 16 marks. (Marks 2x16=32)

1. Explain in detail the research process.
2. What is research design? Explain with examples the various types of research design.
3. Critically examine the various types of probability and non probability sampling methods.
4. Explain the various types of scales of measurement. Mention the scale of measurement of 'Attitude'.
5. Define Primary data. Explain the various methods of Primary data collection.
6. Explain major projective techniques as a tool of data collection.
7. The following data in figure below shows the monthly expenditure in rupees of two families Sharma and Ahuja-

Figure: Expenditure in Rupees of two families

Items	Sharma	Ahuja
FOOD	3900	3000
CLOTHING	2100	1000
FUEL & POWER	1100	500
MISCELLANEOUS	1300	1600

Present the data using

- (i) Pie Chart
 - (ii) Bar Charts
 - (iii) Percentage Bar Charts
8. The temperatures Listed are averages for March, June, September, and December. Calculate the standard deviation for each City. Summarize your results in a sentence.

Jaisalmer, 54⁰F 59⁰F 62⁰F 52⁰F

Bikaner 46⁰F 75⁰F 70⁰F 36⁰F

9. An ambulance service claims that it takes, on the average, 8.9 minutes to reach its destination in emergency calls. To check on this claim, the agency which licenses ambulance services has then timed on 50 emergency calls, getting as mean of 9.3 minutes with a standard deviation of 1.8 minutes. At the 5% level of significance, does this constitute evidence that the figure claimed is too low and what if it is tested at 1% Level of significance?
10. "Discovery of student's 't' is regarded as a landmark in the field of statistics." Discuss.
11. Explain the procedure of t-test for testing the significance o the difference between two sample means along with the assumptions involved.
12. ABC CO. is interested in knowing that if there is difference in the average salary received by managers in two divisions namely Finance and Marketing. Accordingly sample of 12 managers of finance and 10 managers of marketing are selected at random. Managers salaries are known to be normally distributed and the standard deviation are about the same. The table value of t at 5% level o significance for 20 degree of freedom is 2.086.
13. Mention the steps to be taken in Two- Way Anova.
14. Prepare an analysis of variance for the following per hectare production for three varieties of wheat, each grown on 4 plots and state whether the variety differences are significant.

Plot of Land	Per acre production		
	Variety of Wheat		
	X	Y	Z
1.	6	5	5
2.	7	5	4
3.	3	3	3
4.	8	7	4

15. Give in detail the difference between Qualitative and Quantitative Research Approaches.
16. What is Content Analysis? Mention its utility and procedure.

17. A pharmacy company distributed three types of pain reliever into four areas. The effect of sales are given below

Pain Reliever	Sales				
	A	B	C	D	Total
Combiflame	6	4	8	6	24
Brufen	7	6	6	9	28
Ibuzesic	8	5	10	9	32
Total	21	15	24	24	84

If the three pain relievers have made any material difference in sales?

18. How many types of Focus Groups are there? Discuss the essential requirement for Focus Groups.
19. What are the merits and demerits of the Focus Group.
20. Explain the application of Qualitative research in detail.
21. What are the qualitative research techniques to be adopted in investigation of consumer attitudes?
22. Explain in detail the instruments used to collect data in qualitative research.
23. Heights of Men and Women are given (in inches) in the following table:

Height of Men	65	66	67	67	68	69	71	73
Height of Women	67	68	64	68	72	70	69	70

You are required :

- Obtain the two regression equation.
 - Calculate the expected average height of the Women when the height of Men is 74 Inches.
 - Coefficient of Correlation.
24. Discuss the role of computer in various stages of research methodology.
25. What are the items in research report? Explain them in brief.