

Faculty of Management Studies

End Semester Examination May 2025

MS5CO34 Research Methodology

Programme	:	MBA	Branch/Specialisation	:	Business Analytics
Duration	:	3 hours	Maximum Marks	:	60

Note: All questions are compulsory. Internal choices, if any, are indicated. Assume suitable data if necessary.
 Notations and symbols have their usual meaning.

Section 1 (Answer all question(s))

Q1. In business studies, what does feasibility research focus on?

Marks CO BL
1 1 1

Rubric	Marks
Assessing the viability of a business idea	1

- Employee productivity
- Assessing the viability of a business idea
- Reducing taxation
- Expanding into new countries

Q2. What does a research design define?

1 1 1

Rubric	Marks
The structure and plan for conducting research	1

- The layout of a research paper
- The structure and plan for conducting research
- The tools used for data collection
- The process of literature review

Q3. A hypothesis that suggests no relationship between variables is called a-

1 2 1

Rubric	Marks
Null Hypothesis (H_0)	1

- Research Hypothesis
- Null Hypothesis (H_0)
- Alternative Hypothesis (H_1)
- Complex Hypothesis

Q4. What is the role of an extraneous variable in research?

1 2 1

Rubric	Marks
It is not the main focus but can influence the dependent variable	1

- It directly affects the outcome of the study
- It is intentionally manipulated to observe its effect
- It is not the main focus but can influence the dependent variable
- It remains constant throughout the experiment

Q5. What is a major limitation of using direct observation for data collection?

1 3 1

Rubric	Marks
It is subjective and time-consuming	1

- It is subjective and time-consuming
- It is highly cost-effective
- It does not require human involvement
- It guarantees unbiased results

Q6. Which data collection method is best for studying historical events?

1 3 1

Rubric	Marks
Archival research	1

- Questionnaires
 Archival research Experiments
 Field observation

Q7. What is the key assumption of parametric tests?

1 4 1

Rubric	Marks
The data follows a normal distribution	1

- The data follows a normal distribution
 The sample size must be small The data is always qualitative
 The test does not require any assumptions

Q8. Which of the following tests is used to compare the means of two independent groups?

1 4 1

Rubric	Marks
Independent t-test	1

- Wilcoxon signed-rank test
 Independent t-test Chi-square test
 Spearman's rank correlation

Q9. What is the function of an executive summary in a research report?

1 5 1

Rubric	Marks
To provide an overview of key findings and recommendations	1

- To provide an overview of key findings and recommendations
 To list all references and citations To introduce the topic in detail
 To discuss raw data without analysis

Q10. Why is report writing important in research?

1 5 1

Rubric	Marks
It helps in communicating research findings clearly	1

- It allows researchers to hide key findings
 It eliminates the need for data collection It helps in communicating research findings clearly
 It ensures that research remains confidential

Section 2 (Answer all question(s))

Marks CO BL

Q11. What are the key goals of research?

2 1 2

Rubric	Marks
4 goals 2 marks	2

Q12. Outline the characteristics of good research.

3 1 2

Rubric	Marks
6 characteristics 3 marks	3

Q13. (a) Elaborate the use of research in business decision. Explain with suitable examples.

5 1 3

Rubric	Marks
description	4
example	1

(OR)

(b) Discuss the concept of qualitative and quantitative research.

Rubric	Marks
discuss about qualitative research	2.5
discuss about quantitative research	2.5

Section 3 (Answer all question(s))

Q14. Enumerate the types of variables.

Marks CO BL

2 2 2

Rubric	Marks
proper enumeration	2

Q15. (a) Define research problem and literature review and discuss the framework of research process.

8 2 3

Rubric	Marks
Define research problem and literature review	4
discuss the framework of research process	4

(OR)

(b) Explain the concept of a research hypothesis and the types of errors: Type I and Type II with suitable example of each.

Rubric	Marks
concept of a research hypothesis with example	4
the types of errors: Type I and Type II with example	4

Section 4 (Answer all question(s))

Q16. Explain the process of designing of questionnaire in detail.

Marks CO BL

4 3 2

Rubric	Marks
proper process	4

Q17. (a) How is the reliability and validity of measurement scales assessed?

6 3 3

Rubric	Marks
proper explanation	6

(OR)

(b) What is the process of sample design? Explain the sampling and non sampling errors in detail.

Rubric	Marks
what is the process of sample design	3
explain the sampling and non sampling errors	3

Section 5 (Answer all question(s))

Q18. What is parametric and non parametric test?

Marks CO BL
3 4 2

Rubric	Marks
parametric-1.5 non parametric-1.5	3

Q19. (a) Sample of sales in similar shops in two towns are taken for a new product with the following results:

7 4 4

Town	Mean sales	Variance	Size of sample
A	57	5.3	5
B	61	4.8	7

Is there any evidence of difference in sales in the two towns? Use 5 per cent level of significance for testing this difference between the means of two samples by using t-test.

Rubric	Marks
proper solution with all steps	7

(OR)

(b) The table given below shows the data obtained during outbreak of smallpox:

	Attacked	Non attacked	Total
Vaccinated	31	469	500
Non vaccinated	185	1315	1500
Total	216	1784	2000

Test the effectiveness of vaccination in preventing the attack from smallpox. Test your result with the help of chi-square test at 5 per cent level of significance.

Rubric	Marks
proper solution with all steps	7

Section 6 (Answer all question(s))

Q20. Give the importance of report writing.

Marks CO BL
4 5 1

Rubric	Marks
give the importance any four in detail	4

Q21. (a) What is research report? Explain any five types of research reports in detail.

6 4 1

Rubric	Marks
define research report	1
types	5

(OR)

- (b)** Draw the flow chart of synopsis writing. Discuss the guidelines for effective report writing in detail.

Rubric	Marks
flow chart	1
discuss the guidelines for effective report writing	5
