

MCA-I / Semester-II / RM21 Research Methodology (2024-25)

Comprehensive Concurrent Evaluation -1

Faculty Name: Prof. Priyanka Desale

Subject: Research Methodology

Subject Code: RM21

Sr. No.	Component	Marks	Last Date of Submission
1	Written Home Assignment	25	7th Feb 2025

Important Instructions:

1. The subject is evaluated on the basis of given component.
2. Assignments to be submitted in person.
3. Roll No, Student Name, Div., Contact number, Email-id, must be clearly mentioned.

Write down following questions

- 1) A company wants to develop a new marketing strategy. What type of research would be most beneficial for this purpose?
- 2) A researcher wants to investigate the impact of social media on mental health. What would be the next step in the research process after identifying the problem?
- 3) What is the difference between qualitative and quantitative research? Provide an example of each.
- 4) What is the difference between internal and external validity? Provide an example of each.
- 5) CASE STUDY

Investigating the Impact of Climate Change on Local Ecosystems.

A research institute wants to investigate the impact of climate change on local ecosystems.

What are the effects of climate change on biodiversity in local ecosystems?

Data Collection Method: Observational study

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Comprehensive Concurrent Evaluation -2

Faculty Name: Prof. Priyanka Desale

Subject: Research Methodology

Subject Code: RM21

Sr. No.	Component	Marks	Last Date of Submission
1	Written Home Assignment	25	24th Feb 2025

Important Instructions:

1. The subject is evaluated on the basis of given component.
2. Assignments to be submitted in person.
3. Roll No, Student Name, Div., Contact number, Email-id, must be clearly mentioned.

Write down following questions

1. Define research design and explain its significance in research methodology.
2. A researcher wants to investigate the impact of a new teaching method on student outcomes. Which research design would be most suitable?
 - a) Exploratory design
 - b) Descriptive design
 - c) Experimental design
 - d) Quasi-experimental design
3. Describe the primary objectives of a research study, and how do they relate to the research design
4. A researcher uses a standardized questionnaire to measure anxiety levels in a sample of participants. Describe type of validity is being established in this scenario
5. Case Study

Read the following case study and answer the questions:

A researcher wants to investigate the effect of social media usage on mental health

outcomes in young adults. The researcher recruits a sample of 100 participants, ages 18-25, and asks them to complete a survey about their social media usage and mental health symptoms.

1. What type of research design is being used in this study?
2. What are the independent and dependent variables in this study?
3. How can the researcher establish internal validity in this study?
4. What type of sampling design is being used in this study?

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Comprehensive Concurrent Evaluation -3

Faculty Name: Prof. Priyanka Desale

Subject: Research Methodology

Subject Code: RM21

Sr. No.	Component	Marks	Last Date of Submission
1	Written Home Assignment	25	12th Feb 2025

Important Instructions:

1. The subject is evaluated on the basis of given component.
2. Assignments to be submitted in person.
3. Roll No, Student Name, Div., Contact number, Email-id, must be clearly mentioned.

Write down following questions

- 1) What is primary data collection, and how does it differ from secondary data collection?
- 2) Distinguish between probability and non-probability sampling methods. Provide examples of each.
- 3) How does stratified sampling differ from cluster sampling? Provide an example to illustrate your answer.
- 4) How is sample size calculated, and what are the key considerations in determining an appropriate sample size?
- 5) Case Study

The results showed a significant positive correlation between social media usage and symptoms of depression and anxiety. The interviews revealed that students who spent more time on social media were more likely to experience symptoms of depression and anxiety.

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Comprehensive Concurrent Evaluation -4

Faculty Name: Prof. Priyanka Desale

Subject: Research Methodology

Subject Code: RM21

Sr. No.	Component	Marks	Last Date of Submission
1	Written Home Assignment	25	21th March 2025

Important Instructions:

1. The subject is evaluated on the basis of given component.
2. Assignments to be submitted in person.
3. Roll No, Student Name, Div., Contact number, Email-id, must be clearly mentioned.

Write down following questions

- 1) What is hypothesis testing, and what are the different types of hypotheses (null and alternative)?
- 2) How do researchers categorize data in qualitative research, and what are the benefits of categorization?
- 3) What is the purpose of confidence intervals, and how are they constructed?
- 4) How do researchers ensure the reliability and validity of qualitative data analysis?
- 5) Case Study

The Impact of Climate Change on Coastal Communities

A researcher, (XYZ) is conducting a study on the impact of climate change on coastal communities. The study aims to investigate the effects of sea-level rise, increased flooding, and saltwater intrusion on the livelihoods of coastal residents.

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Comprehensive Concurrent Evaluation -5

Faculty Name: Prof. Priyanka Desale

Subject: Research Methodology

Subject Code: RM21

Sr. No.	Component	Marks	Last Date of Submission
1	Written Home Assignment	25	2th April 2025

Important Instructions:

1. The subject is evaluated on the basis of given component.
2. Assignments to be submitted in person.
3. Roll No, Student Name, Div., Contact number, Email-id, must be clearly mentioned.

Write down following questions

- 1) How do you write an effective abstract, and what information should it include?
- 2) How do you avoid plagiarism in your writing, and what are the consequences of plagiarism?
- 3) Describe the best practices for visual presentation of data, including creating effective tables, charts, and graphs
- 4) Discuss the benefits and limitations of using visual aids in an oral presentation, and how do you effectively incorporate them
- 5) Case Study

The study finds that climate change has significant impacts on coastal communities, including increased flooding, saltwater intrusion, and loss of livelihoods. XYZ recommends that policymakers and stakeholders take immediate action to address the impacts of climate change on coastal communities, including:

1. Implementing adaptation measures such as sea walls and flood-control systems
2. Providing support for climate-resilient infrastructure and livelihoods
3. Promoting climate change awareness and education among coastal residents