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BRAINWARE UNIVERSITY

Term End Examination 2024-2025

Programme – M.Sc.(BT)-2024

Course Name – Research Designing

Course Code - MBT20206

(Semester II)

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

(i) Select the difference between analytical research and descriptive research.

a) Analytical research focuses on controlling variables, while descriptive research does not.

b) Analytical research aims to uncover the causes behind phenomena, while descriptive research only describes the situation.

c) Analytical research is used only for surveys, while descriptive research uses comparative methods.

d) Analytical research does not involve data collection, whereas descriptive research does.

(ii) Select the role of research methodology in research.

a) It refers to the specific techniques used to collect data

b) It is the systematic approach to solving a research problem

c) It is focused only on analysing existing data

d) It only includes data collection methods

(iii) A research hypothesis is defined as _____. Select the correct option.

a) A prediction that cannot be tested scientifically

b) A relationship between two variables that can be tested

c) A final conclusion drawn after analysing data

d) An extraneous factor influencing the study

(iv) What is the primary characteristic of descriptive research?

a) It controls variables

b) It describes the current state

c) It manipulates variables

d) It establishes causation

(v) Apply which research method is typically used in behavioral sciences?

a) Qualitative research

b) Quantitative research

c) Applied research

d) Survey research

- (vi) Determine which statement accurately describes applied research.
- It primarily aims to develop general theories.
 - It seeks to solve specific, real-world problems.
 - It focuses only on philosophical concepts.
 - It does not require empirical validation.
- (vii) Identify the key characteristic of fundamental research.
- Solving immediate practical problems
 - Developing theories and concepts
 - Implementing business strategies
 - Addressing industry-specific challenges
- (viii) Explain the purpose of applied research.
- To generate new theories
 - To find solutions for real-world problems
 - To study past research trends
 - To modify existing policies
- (ix) Which source of research problems involves examining literature gaps?
- Workplace challenges
 - Policy reports
 - Review of literature
 - Technological advancements
- (x) Explain why hypothesis testing research is important.
- It defines problems clearly
 - It confirms relationships between variables
 - It generates new theories
 - It eliminates the need for data collection
- (xi) Define the purpose of a Review of Literature.
- To analyze research findings
 - To provide background knowledge
 - To conduct experiments
 - To develop statistical tools
- (xii) Differentiate between dependent and independent variables.
- Dependent variable influences independent variable
 - Independent variable influences dependent variable
 - Both influence each other equally
 - Neither affects the research
- (xiii) Develop a key component of a bibliography entry?
- Page color
 - Author(s)
 - Paper size
 - Word count
- (xiv) Interpret the significance of databases in handling massive research datasets.
- Databases organize and retrieve data efficiently
 - Databases slow down data analysis
 - Databases are only used for small data sets
 - Databases eliminate the need for statistical tools
- (xv) Construct a framework for interpreting the impact of organic fertilizers on soil microbiology.
- Based on farmer interviews
 - Using a controlled field experiment and microbial analysis
 - Referring to previous studies only
 - Ignoring external variables

Group-B

(Short Answer Type Questions)

3 x 5=15

- Describe research hypothesis. (3)
- Examine the significance of cause-and-effect relationships in analytical research. (3)
- Interpret the role of statistical tools in quantitative research. (3)
- Deconstruct the role of PubMed in indexing biomedical research. (3)
- Evaluate the importance of adherence to ethical guidelines in research and publication. (3)

OR

- Judge the balance between conciseness and comprehensiveness in journal articles. (3)

Group-C
(Long Answer Type Questions)

5 x 6=30

7. Conclude different steps involved in report writing. (5)
8. Write a short note on 'Layout of Research Report'. (5)
9. Examine the role of review articles in synthesizing existing research. (5)
10. Remember the difference between descriptive and analytical research (5)
11. Analyze the concept of error in research. (5)
12. Formulate a case study research design to investigate the long-term effects of urban farming projects on food security in low-income communities. (5)

OR

Design a survey-based study to evaluate public perception of climate change policies in urban and rural populations. Include sample size determination and analysis techniques. (5)

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