

RESEARCH METHODOLOGY

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Unit I

objective and scientific research

- Facts
- Concept
- Causality
- Uncertainty
- Probability
- Dialectical and historical materialism

Facts - Question

A fact is:

- a) An opinion
- b) A verifiable statement
- c) A theory
- d) A belief

Facts - Answer

Correct Answer: A verifiable statement

Facts - Question

- Which of the following is an example of a fact?
- a) The Earth is flat.
- b) Water boils at 100°C at sea level.
- c) Democracy is the best form of government.
- d) I like pizza.

Facts - Answer

- Correct Answer: Water boils at 100°C at sea level.

Facts - Question

- Facts are important in research because:
- a) They provide evidence for conclusions
- b) They express personal feelings
- c) They create uncertainty
- d) They cannot be proven

Facts - Answer

- Correct Answer: They provide evidence for conclusions

Facts - Question

- Which one is a scientific fact?
- a) The moon is beautiful
- b) Gravity attracts objects toward the Earth
- c) Summer is better than winter
- d) Blue is the best color

Facts - Answer

- Correct Answer: Gravity attracts objects toward the Earth

Facts - Question

- Facts can be established through:
 - a) Speculation
 - b) Observation and verification
 - c) Guesswork
 - d) Belief systems

Facts - Answer

- Correct Answer: Observation and verification

Facts - Question

- Facts differ from opinions because:
- a) Facts are based on evidence
- b) Opinions are always wrong
- c) Facts are always positive
- d) Opinions are legal documents

Facts - Answer

- Correct Answer: Facts are based on evidence

Facts - Question

- Which is not a fact?
- a) Humans need oxygen to survive
- b) The Pacific Ocean is the largest ocean
- c) Ice melts at 0°C under standard conditions
- d) Jazz music is better than rock music

Facts - Answer

- Correct Answer: Jazz music is better than rock music

Concepts - Question

- A concept is best defined as:
- a) A detailed story
- b) An abstract idea representing something
- c) A proven fact
- d) A physical object

Concepts - Answer

- Correct Answer: An abstract idea representing something

Concepts - Question

- In social sciences, concepts help:
- a) Frame research questions
- b) Eliminate all uncertainty
- c) Replace facts
- d) Avoid data collection

Concepts - Answer

- Correct Answer: Frame research questions

Concepts - Question

- Which of the following is a concept?
- a) Inflation
- b) 5% interest rate in 2023
- c) The Eiffel Tower
- d) 32°C temperature

Concepts - Answer

- Correct Answer: Inflation

Concepts - Question

- Concepts can be made measurable using:
- a) Operational definitions
- b) Opinions
- c) Emotions
- d) Guesswork

Concepts - Answer

- Correct Answer: Operational definitions

Concepts - Question

- A concept in economics that refers to 'general increase in prices' is:
- a) Deflation
- b) Inflation
- c) Stagflation
- d) Depression

Concepts - Answer

- Correct Answer: Inflation

Concepts - Question

- Which statement about concepts is correct?
- a) Concepts are physical entities
- b) Concepts are purely subjective and cannot be studied
- c) Concepts are building blocks of theories
- d) Concepts cannot be defined

Concepts - Answer

- Correct Answer: Concepts are building blocks of theories

Concepts - Question

- An example of a broad concept in sociology is:
- a) Social stratification
- b) Number of working hours
- c) Daily temperature
- d) Annual rainfall

Concepts - Answer

- Correct Answer: Social stratification

Causality - Question

- Causality means:
 - a) One event always follows another
 - b) One event causes another
 - c) Two events happen at the same time
 - d) Events occur randomly

Causality - Answer

- Correct Answer: One event causes another

Causality - Question

- In research, causality requires:
- a) Correlation, temporal precedence, and elimination of alternative explanations
- b) Random guessing
- c) A single observation
- d) Opinion-based analysis

Causality - Answer

- Correct Answer: Correlation, temporal precedence, and elimination of alternative explanations

Causality - Question

- Which is an example of causality?
- a) Ice cream sales increase and sunburn cases increase in summer
- b) Smoking increases the risk of lung cancer
- c) People wear jackets in winter
- d) Rain is wet

Causality - Answer

- Correct Answer: Smoking increases the risk of lung cancer

Causality - Question

- Causality is often tested using:
- a) Controlled experiments
- b) Opinion polls only
- c) Random anecdotes
- d) Superstitions

Causality - Answer

- Correct Answer: Controlled experiments

Causality - Question

- 'A causes B' means:
 - a) A is always followed by B
 - b) A produces a change in B
 - c) B happens without relation to A
 - d) A and B are unrelated

Causality - Answer

- Correct Answer: A produces a change in B

Causality - Question

- Which is not required to establish causality?
- a) Statistical significance
- b) Temporal order
- c) Correlation
- d) Personal belief

Causality - Answer

- Correct Answer: Personal belief

Causality - Question

- Spurious correlation means:
- a) Two variables are linked due to a third factor
- b) A causes B directly
- c) B causes A directly
- d) There is no relationship at all

Causality - Answer

- Correct Answer: Two variables are linked due to a third factor

Uncertainty - Question

- Uncertainty refers to:
- a) Complete knowledge of an event
- b) Lack of complete certainty about outcomes
- c) A guaranteed prediction
- d) Only past events

Uncertainty - Answer

- Correct Answer: Lack of complete certainty about outcomes

Uncertainty - Question

- Which of the following situations shows uncertainty?
 - a) Tossing a fair coin
 - b) The sun rising in the east tomorrow
 - c) Water boiling at 100°C
 - d) Earth's gravitational pull

Uncertainty - Answer

- Correct Answer: Tossing a fair coin

Uncertainty - Question

- In economics, uncertainty is different from risk because:
 - a) Risk is measurable, uncertainty is not
 - b) Risk is unknown, uncertainty is known
 - c) Both are the same
 - d) Risk is emotional

Uncertainty - Answer

- Correct Answer: Risk is measurable, uncertainty is not

Uncertainty - Question

- Uncertainty in decision-making means:
- a) Decision-makers have full data
- b) Outcomes are partly or wholly unknown
- c) All outcomes are equal
- d) Outcomes are fixed

Uncertainty - Answer

- Correct Answer: Outcomes are partly or wholly unknown

Uncertainty - Question

- An example of uncertainty in business is:
- a) Future interest rates in 5 years
- b) Today's temperature
- c) Weight of an object measured on a scale
- d) Sum of $2+2$

Uncertainty - Answer

- Correct Answer: Future interest rates in 5 years

Uncertainty - Question

- Frank Knight distinguished uncertainty from risk in:
 - a) 1921
 - b) 1905
 - c) 1945
 - d) 2000

Uncertainty - Answer

- Correct Answer: 1921

Uncertainty - Question

- Uncertainty can be reduced by:
 - a) Collecting more data and using models
 - b) Ignoring information
 - c) Relying only on luck
 - d) Making no decisions

Uncertainty - Answer

- Correct Answer: Collecting more data and using models

Probability - Question

- Probability measures:
 - a) The likelihood of an event occurring
 - b) The number of facts collected
 - c) The size of an object
 - d) The certainty of an event

Probability - Answer

- Correct Answer: The likelihood of an event occurring

Probability - Question

- Probability values range from:
- a) -1 to +1
- b) 0 to 1
- c) 0 to 1000
- d) 1 to 10

Probability - Answer

- Correct Answer: 0 to 1

Probability - Question

- A probability of 0 means:
- a) The event is certain
- b) The event is impossible
- c) The event is likely
- d) The event is random

Probability - Answer

- Correct Answer: The event is impossible

Probability - Question

- The probability of getting a head in a fair coin toss is:
 - a) 0
 - b) 0.25
 - c) 0.5
 - d) 1

Probability - Answer

- Correct Answer: 0.5

Probability - Question

- In probability theory, mutually exclusive events mean:
 - a) They can occur together
 - b) They cannot occur together
 - c) They are independent
 - d) They are certain

Probability - Answer

- Correct Answer: They cannot occur together

Probability - Question

- The sum of probabilities of all possible outcomes of an event is:
- a) 0.5
- b) 0
- c) 1
- d) Infinite

Probability - Answer

- Correct Answer: 1

Probability - Question

- Which formula represents conditional probability?
- a) $P(A|B) = P(A \cap B) / P(B)$
- b) $P(A) + P(B)$
- c) $P(A) \times P(B)$
- d) $P(A) - P(B)$

Probability - Answer

- Correct Answer: $P(A|B) = P(A \cap B) / P(B)$

Dialectical Materialism - Question

- Dialectical materialism is a philosophy developed by:
 - a) Adam Smith
 - b) Karl Marx and Friedrich Engels
 - c) Max Weber
 - d) Auguste Comte

Dialectical Materialism - Answer

- Correct Answer: Karl Marx and Friedrich Engels

Dialectical Materialism - Question

- The term 'dialectics' refers to:
- a) Static thinking
- b) Change through contradiction
- c) Religious doctrine
- d) Random events

Dialectical Materialism - Answer

- Correct Answer: Change through contradiction

Dialectical Materialism - Question

- In dialectical materialism, material conditions are considered:
 - a) Irrelevant to society
 - b) The basis of social development
 - c) Fixed and unchangeable
 - d) Purely ideological

Dialectical Materialism - Answer

- Correct Answer: The basis of social development

Dialectical Materialism - Question

- The dialectical method involves:
- a) Thesis → Antithesis → Synthesis
- b) Cause → Effect → Result
- c) Input → Process → Output
- d) Fact → Opinion → Conclusion

Dialectical Materialism - Answer

- Correct Answer: Thesis → Antithesis →
Synthesis

Dialectical Materialism - Question

- According to dialectical materialism, social change is driven by:
 - a) Class struggle
 - b) Moral values
 - c) Scientific discovery alone
 - d) Random events

Dialectical Materialism - Answer

- Correct Answer: Class struggle

Dialectical Materialism - Question

- Dialectical materialism rejects:
 - a) The role of matter in history
 - b) Idealism as the main driver of change
 - c) The influence of economics on society
 - d) The idea of social evolution

Dialectical Materialism - Answer

- Correct Answer: Idealism as the main driver of change

Dialectical Materialism - Question

- The philosophy of dialectical materialism is a core part of:
 - a) Capitalist ideology
 - b) Marxist theory
 - c) Classical economics
 - d) Positivism

Dialectical Materialism - Answer

- Correct Answer: Marxist theory

Historical Materialism - Question

- Historical materialism is a method for understanding:
 - a) Changes in art styles
 - b) Social and historical development
 - c) Scientific experiments
 - d) Natural disasters

Historical Materialism - Answer

- Correct Answer: Social and historical development

Historical Materialism - Question

- Karl Marx's historical materialism emphasizes:
- a) Religion as the driving force of history
- b) Material economic conditions shaping society
- c) Random changes in history
- d) Personal morality

Historical Materialism - Answer

- Correct Answer: Material economic conditions shaping society

Historical Materialism - Question

- The primary focus of historical materialism is on:
 - a) Modes of production
 - b) Political parties
 - c) Weather patterns
 - d) Individual heroes

Historical Materialism - Answer

- Correct Answer: Modes of production

Historical Materialism - Question

- In historical materialism, history progresses through:
 - a) Economic stages
 - b) Artistic movements
 - c) Scientific revolutions only
 - d) Random events

Historical Materialism - Answer

- Correct Answer: Economic stages

Historical Materialism - Question

- Which of the following is an example of an economic stage in Marx's view?
- a) Feudalism
- b) Romanticism
- c) Realism
- d) Impressionism

Historical Materialism - Answer

- Correct Answer: Feudalism

Historical Materialism - Question

- The transition from feudalism to capitalism was driven mainly by:
 - a) Changes in the mode of production
 - b) Religious debates
 - c) Scientific discoveries only
 - d) War alone

Historical Materialism - Answer

- Correct Answer: Changes in the mode of production

Historical Materialism - Question

- Historical materialism sees the superstructure as:
 - a) The economic base of society
 - b) Ideas, politics, and culture shaped by the economic base
 - c) A physical building
 - d) A military system

Historical Materialism - Answer

- Correct Answer: Ideas, politics, and culture shaped by the economic base

Historical Materialism - Question

- According to historical materialism, the ultimate stage of history is:
 - a) Capitalism
 - b) Socialism leading to communism
 - c) Feudalism
 - d) Primitive communism

Historical Materialism - Answer

- Correct Answer: Socialism leading to communism