

## RESEARCH METHODOLOGY

1. What is a research hypothesis ?
  - (a) A statement of fact
  - (b) A testable prediction
  - (c) A conclusion drawn from data
  - (d) A research tool
  
2. Which of the following is *not* a type of research design ?
  - (a) Exploratory
  - (b) Descriptive
  - (c) Conclusive
  - (d) Narrative
  
3. What is the primary goal of exploratory research ?
  - (a) To gain insights and explore ideas
  - (b) To test hypotheses
  - (c) To confirm existing theories
  - (d) To collect quantitative data
  
4. Which of the following is a characteristic of qualitative research ?
  - (a) Seeks to understand meanings and experiences
  - (b) Focuses on numerical data
  - (c) Uses random sampling exclusively
  - (d) Involves statistical analysis

5. In research, what does 'sampling' refer to ?
- (a) Choosing a research question
  - (b) Selecting a subset of a population
  - (c) Analyzing data
  - (d) Formulating a hypothesis
6. What is the main purpose of a literature review in research ?
- (a) To gather data
  - (b) To summarize findings
  - (c) To identify gaps and justify research
  - (d) To formulate hypotheses
7. Which of the following is a potential source of error in research designs ?
- (a) Bias
  - (b) Control groups
  - (c) Random sampling
  - (d) Variable manipulation
8. What role do variables play in research ?
- (a) They are fixed elements
  - (b) They represent measurable traits or characteristics
  - (c) They are irrelevant to research
  - (d) They only exist in qualitative studies
9. Which of the following research designs focuses on establishing cause-and-effect relationships ?
- (a) Descriptive
  - (b) Exploratory
  - (c) Causal
  - (d) Historical

10. Which term describes the ethical obligation to report findings truthfully ?
- (a) Scientific misconduct                      (b) Research integrity  
(c) Intellectual honesty                          (d) Conflicts of interest
11. What is the role of propositions in theory building ?
- (a) They serve as standalone theories  
(b) They are relationships that can be tested  
(c) They are irrelevant to research  
(d) They only exist in qualitative studies
12. What distinguishes conclusive research from exploratory research ?
- (a) It uses qualitative methods  
(b) It aims to provide final answers  
(c) It is less structured  
(d) It only involves surveys
13. Which of the following is a key principle of research ethics ?
- (a) Fabrication of data  
(b) Plagiarism  
(c) Informed consent  
(d) Ignoring conflicts of interest
14. In which of the following is the 'impact factor' primarily used ?
- (a) Qualitative Research                      (b) Descriptive Research  
(c) Experimental Research                      (d) Academic Publishing

15. Which of the following describes ‘falsification’ in research misconduct ?
- (a) Copying someone else's work
  - (b) Misrepresenting research data
  - (c) Making false claims about authorship
  - (d) Not citing sources
16. What is the primary focus of descriptive research ?
- (a) To find cause-and-effect relationships
  - (b) To provide a detailed account of a phenomenon
  - (c) To explore new areas of study
  - (d) To test hypotheses
17. Which research method is typically used for gathering qualitative data ?
- (a) Surveys
  - (b) Experiments
  - (c) Interviews
  - (d) Case studies
18. Which of the following is a criterion for evaluating research sources ?
- (a) Popularity
  - (b) Author’s age
  - (c) Length
  - (d) Relevance
19. What does ICT stand for in the context of research ?
- (a) Information and Communication Technology
  - (b) Information Collection Techniques
  - (c) Integrated Communication Tools
  - (d) International Collaborative Teams

20. In which stage of the research process are objectives formulated ?
- (a) Data collection                      (b) Literature review  
(c) Research design                      (d) Analysis
21. What is the significance of referencing in research ?
- (a) To embellish the paper  
(b) To acknowledge sources and avoid plagiarism  
(c) To make the paper longer  
(d) To confuse readers
22. What type of error occurs when a researcher fails to control for extraneous variables ?
- (a) Systematic error                      (b) Random error  
(c) Measurement error                      (d) Sampling error
23. Which type of sampling involves selecting participants based on specific characteristics ?
- (a) Random sampling                      (b) Convenience sampling  
(c) Stratified sampling                      (d) Purposive sampling
24. What is the primary aim of causal research ?
- (a) To explore relationships  
(b) To describe phenomena  
(c) To establish a cause-effect relationship  
(d) To gather qualitative data

25. Which of the following describes the term 'plagiarism' ?
- (a) Collaborating without acknowledgement
  - (b) Falsifying data
  - (c) Using someone else's work without credit
  - (d) Misrepresenting findings
26. What is one of the main objectives of conclusive research ?
- (a) To provide conclusive evidence
  - (b) To explore ideas
  - (c) To generate new theories
  - (d) To gather exploratory data
27. What type of research focuses on events that have already occurred ?
- (a) Historical
  - (b) Experimental
  - (c) Descriptive
  - (d) Exploratory
28. Which of the following best describes 'scientific misconduct' ?
- (a) Ethical research practices
  - (b) Ignoring conflicts of interest
  - (c) Any violation of ethical standards in research
  - (d) Thorough data analysis
29. What does qualitative data typically consist of ?
- (a) Numbers and statistics
  - (b) Experimental results
  - (c) Graphs and charts
  - (d) Text, interviews, and observations

- 30.** Which of the following is an example of a secondary data source ?
- (a) A survey conducted by the researcher
  - (b) A laboratory experiment
  - (c) Interviews conducted by the researcher
  - (d) Government statistics
- 31.** In research, what is a 'theory' ?
- (a) A guess
  - (b) A proven fact
  - (c) A systematic explanation of phenomena
  - (d) An anecdotal observation
- 32.** Which of the following is an essential aspect of research integrity ?
- (a) Avoiding all criticism
  - (b) Ignoring dissenting opinions
  - (c) Acknowledging contributions of others
  - (d) Overstating the significance of findings
- 33.** Which referencing style is most commonly used in social sciences ?
- (a) APA
  - (b) MLA
  - (c) Chicago
  - (d) Harvard
- 34.** What is an impact factor ?
- (a) A measure of a journal's quality
  - (b) A tool for qualitative research
  - (c) A statistical method for data analysis
  - (d) A type of sampling technique

- 35.** What is the rationale for using qualitative research ?
- (a) To quantify results
  - (b) To understand complex behaviors and social phenomena
  - (c) To conduct experiments
  - (d) To gather numerical data only
- 36.** Which of the following terms refers to an error that occurs due to chance ?
- (a) Systematic error
  - (b) Sampling error
  - (c) Measurement error
  - (d) Random error
- 37.** What is the role of indexing and citation databases in research ?
- (a) To limit access to research
  - (b) To promote unethical research
  - (c) To track and evaluate research outputs
  - (d) To confuse researchers
- 38.** In qualitative research, what is a common method of data collection ?
- (a) Randomized controlled trials
  - (b) Surveys with closed questions
  - (c) Focus groups
  - (d) Statistical analysis
- 39.** What does the term ‘conflicts of interest’ refer to in research ?
- (a) When researchers are unbiased
  - (b) When personal interests affect research integrity
  - (c) When researchers work collaboratively
  - (d) When data is misinterpreted



40. Which of the following is a key component of ethical research conduct ?
- (a) Ignoring ethical guidelines
  - (b) Transparency in data reporting
  - (c) Misrepresenting authorship
  - (d) Fabricating data
41. What is the focus of historical research ?
- (a) Present data analysis
  - (b) Future predictions
  - (c) Understanding past events
  - (d) Causal relationships
42. In research, what does 'data interpretation' involve ?
- (a) Collecting new data
  - (b) Analyzing and making sense of data
  - (c) Conducting interviews
  - (d) Writing the research proposal
43. Which of the following best describes 'data triangulation' ?
- (a) Using multiple methods or data sources to enhance credibility
  - (b) Collecting data from a single source
  - (c) Focusing solely on quantitative data
  - (d) Analyzing data without context
44. What is one of the main functions of a research design ?
- (a) To gather irrelevant data
  - (b) To outline the research approach
  - (c) To ignore ethical considerations
  - (d) To present data without analysis

45. What does it mean to 'fabricate' data in research ?
- (a) To collect data ethically
  - (b) To summarize findings accurately
  - (c) To analyze data thoroughly
  - (d) To create false data or results
46. What is a common tool used for qualitative data analysis ?
- (a) SPSS
  - (b) NVivo
  - (c) Excel
  - (d) R
47. Which of the following research methods is most suitable for studying small, specific groups ?
- (a) Surveys
  - (b) Experiments
  - (c) Case studies
  - (d) Longitudinal studies
48. What is the purpose of publication ethics ?
- (a) To ensure fair and honest reporting in research
  - (b) To promote unethical practices
  - (c) To prioritize personal gain
  - (d) To limit research collaboration
49. Which of the following represents a qualitative data analysis method ?
- (a) Correlation analysis
  - (b) ANOVA
  - (c) Regression analysis
  - (d) Thematic analysis
50. What role does ICT play in modern research ?
- (a) It complicates the research process
  - (b) It has no impact on research
  - (c) It limits access to research findings
  - (d) It facilitates data collection and analysis

## FOODS AND NUTRITION

51. Which of the following is used to inhibit mold growth in bread ?
- (a) Benjoic Acid                      (b) Nitrate  
(c) Sorbic Acid                        (d) Lactic Acid
52. There is.....increase in BMR with every 10° F increase in body temperature.
- (a) 12%                                  (b) 7%  
(c) 13%                                  (d) 8%
53. Which of the following nutrients play role in synthesis of haemoglobin ?
- (a) Iron, Vitamin B<sub>12</sub>  
(b) Vitamin C, Folic Acid  
(c) Copper, Protein  
(d) All of the above
54. Deficiency of thiamine in diet causes :
- (a) Osteopenia                        (b) Scurvey  
(c) Beri-Beri                            (d) Pellagra

**55.** For the Proper utilization of protein there should be enough :

- (a) Vitamin C
- (b) Calories
- (c) Fats
- (d) None of these

**56.** Which of the following are essential amino acids ?

- (a) Tryptophan, Valine, Lysine, Leucine
- (b) Alanine, Lysine, Leucine, Serine
- (c) Tryptophan, Valine, Serine, Leucine
- (d) Tryptophan, Lysine, Leucine, Serine

**57.** Rate limiting enzyme of cholesterol synthesis in body is :

- (a) Thiolyates
- (b) Acetyl CoA Transferase
- (c) HMG CoA Reductase
- (d) Mevalonate Kinase

**58.** Saliva contains :

- (a) Protease
- (b) Lipase
- (c) Amylase
- (d) Nuclease

59. ....of Tryptophan = 1 mg of Niacin.

- (a) 40 mg
- (b) 60 mg
- (c) 90 mg
- (d) 35 mg

60. Protein content of Soyabean is approximately :

- (a) 40 per cent
- (b) 50 per cent
- (c) 20 per cent
- (d) 30 per cent

61. Characteristics feature of any form of chromatography is :

- (a) the use of molecules soluble in water
- (b) the use of stationary and mobile phase
- (c) the use of inert gas
- (d) the use of rf value

62. Double fortified salt contain :

- (a) Zinc and Iron
- (b) Zinc and Potassium
- (c) Iron and Calcium
- (d) Iodine and Iron

63. Which of the following hormones has increasing effect on blood glucose level ?

- (a) Glucagon
- (b) Insulin
- (c) Thyroxine
- (d) None of these

64. Polysaccharide converted to monosaccharides is an example of :

- (a) Anabolism
- (b) Metabolism
- (c) Catabolism
- (d) All of these

65. From which plant source is gluten derived ?

- (a) Soyabean
- (b) Rice
- (c) Corn
- (d) Wheat

66. The complex carbohydrate (Polysaccharide) found in vegetables fruits and grains and is called :

- (a) Starch
- (b) Cellulose
- (c) Glycogen
- (d) Maltose

67. What does the term 'smoke point mean' ?
- (a) When smoke starts to rise from the food being cooked.
  - (b) When smoke in the kitchen sets off the fire alarm.
  - (c) The point when oil starts to burn and smoke.
  - (d) When oil starts to boil.
68. ....is used for fruit preservation in preparation of jams and marmalades manufacture, etc.
- (a) Sugar
  - (b) Acetic Acid
  - (c) Sorbates
  - (d) Ascorbic Acid
69. During tuberculosis.....diet is recommended.
- (a) High Caloric
  - (b) High Caloric high Protein
  - (c) High Caloric high fibre
  - (d) None of the above
70. Vitamin D has important role in absorption of :
- (a) Calcium
  - (b) Iron
  - (c) Magnesium
  - (d) Vitamin A

71. Which amino acid is limiting amino acid in cereals ?

- (a) Leucine
- (b) Methionine
- (c) Glutamine
- (d) Lysine

72. Which one of the following is the storage form of glucose in our body ?

- (a) Insulin
- (b) Maltose
- (c) Glycogen
- (d) Glucagon

73. Lecithin and cephalins are example of which one of the following ?

- (a) Phospholipids
- (b) Triglycerides
- (c) Glycolipids
- (d) Derived lipids

74. The type of iron which is better absorbed from diet ?

- (a) Haem iron
- (b) Fortified iron
- (c) Non-haem iron
- (d) All of the above



75. BMI Calculated as :

- (a) Height (m<sup>2</sup>)/Weight (kg)
- (b) Weight (kg)/Height (m<sup>2</sup>)
- (c) Weight (g)/Height (m<sup>2</sup>)
- (d) Height (cm<sup>2</sup>)/Weight (kg)

76. Absorption occurs primarily in which one among the following part of body ?

- (a) Mouth
- (b) Stomach
- (c) Small intestine
- (d) Large intestine

77. Sprouting helps to increases which of the following nutrients ?

- (a) Vitamin A and D
- (b) Vitamin B Complex and C
- (c) Vitamin E and A
- (d) Vitamin B<sub>1</sub> and D

78. What percentage of total daily calories should come from proteins, as per the RDA ?

- (a) 10-15%
- (b) 15-20%
- (c) 20-25%
- (d) 25-30%

**79.** Body weight of Indian reference women as per ICMR is :

- (a) 65
- (b) 50
- (c) 60
- (d) 55

**80.** One gram of Carbohydrates Proteins and Fats produces :

- (a) 4, 4 and 9 k cal respectively
- (b) 4, 6 and 9 k cal respectively
- (c) 3, 4.5 and 9.5 k cal respectively
- (d) 9, 4 and 4 k cal respectively

**81.** Maltose consists of which of the following combinations ?

- (a) Galactose + Glucose
- (b) Glucose + Fructose
- (c) Glucose + Glucose
- (d) Glucose + Mannose

**82.** The causal agent of human disease botulism can be classified under :

- (a) Bacterial toxin
- (b) Viral toxin
- (c) Mycotoxin
- (d) Chemical toxin

- 83.** All organic compounds contain \_\_\_\_\_ :
- (a) Hydrogen (b) Carbon  
(c) Oxygen (d) Nitrogen
- 84.** Muffle furnace is used for the estimation of :
- (a) fat (b) ash  
(c) iron (d) protein
- 85.** Preservative used for light coloured fruits and vegetables :
- (a) Potassium metabisulphite  
(b) Citric acid  
(c) Glacial acetic acid  
(d) Sodium glutamate
- 86.** Prophylactic dose of Vitamin A for preschool children is :
- (a) 100,000 IU (b) 200,000 IU  
(c) 300,000 IU (d) 400,000 IU
- 87.** Oedema is characteristic feature of :
- (a) Marasmus (b) Kwashiorkor  
(c) Both (a) and (b) (d) None of these

**88.** Hormone which help in milk secretion :

- (a) Estrogen
- (b) Prolactin
- (c) Oxytocin
- (d) Thyroxin

**89.** High content of triglycerides are seen in :

- (a) LDL
- (b) HDL
- (c) VLDL
- (d) Chylomicrons

**90.** Oxidative phosphorylation is an.....metabolism in aerobic microorganism.

- (a) Energy yielding
- (b) Energy releasing
- (c) Both (a) and (b)
- (d) None of these

**91.** One of the fat-soluble Vitamins involved in coagulation is :

- (a) Vitamin K
- (b) Vitamin A
- (c) Vitamin D
- (d) Vitamin E

**92.** Hormone that works to raise blood calcium levels by stimulating osteoclast to break.

- (a) Calcitonin
- (b) Oxytocin
- (c) Parathyroid hormone
- (d) Prolactin

93. Deficiency of which of the following may result into hypochromic anaemia ?

- (a) Iron
- (b) Vitamin B<sub>4</sub>
- (c) Vitamin B<sub>6</sub>
- (d) Vitamin D

94. Which one of the following anti nutrients in food interferes with the utilization of iodine by the thyroid gland ?

- (a) Favism factor
- (b) Goitrogens
- (c) Lathyrogenic
- (d) None of the above

95. Vanaspati is an adulterant in which one of the following ?

- (a) Ghee & Butter
- (b) Haldi
- (c) Dalda
- (d) Refined Oil

96. Calorie value of food can be measured by :

- (a) Benedict ruth apparatus
- (b) Bomb Calorimeter
- (c) Calorimeter
- (d) None of the above

97. When food is given directly in stomach and intestine it is called.....Nutrition.

- (a) Enteral
- (b) Intravenous
- (c) Nasogastric feeding
- (d) Parenteral

98. Folic acid deficiency in pregnant women leads to.....in new born.

- (a) Alopecia
- (b) Neural tube defects
- (c) Pigeon chest
- (d) Bow legs

99. In Anaemia prophylaxis programme supplementation of iron folic acid is :

- (a) 100 mg. iron 500 ug folic acid
- (b) 80 mg. iron 500 ug folic acid
- (c) 120 mg. iron 200 ug folic acid
- (d) None of the above

100. What type of menu offers a fix selection of dishes for a specific period ?

- (a) Static menu
- (b) Dynamic menu
- (c) A la carte menu
- (d) Cycle menu