

**INDIAN INSTITUTE OF PUBLIC HEALTH GANDHINAGAR
PHD ENTRANCE EXAMINATION QUESTION PAPER 2024**

SECTION I RESEARCH METHODOLOGY

SNo	Question	Mark	Option1	Option2	Option3	Option4	Correct Option
1	Which of the following disciplines contribute to health research?	1	Bio-medical research	Biostatistics	Social science research	All of the above	4
2	Chi-square test is always used to test	1	Mean	Association	Variance	Population median	2
3	What is research?	1	Research is systematic and scientific process of investigation	Searching solutions systematically	Search of truth with proper methods	All of the above	4
4	What is informed consent in research?	1	Obtaining permission from participants after the study is completed	Providing participants with information about the study before they agree to participate	Withholding information from participants to avoid bias	Paying participants to participate in the study	2
5	What is a hypothesis?	1	A proven fact	Tentative statement of truth	Research question	A data analysis technique	2
6	What is the purpose of a literature review in research?	1	Presenting research findings	Testing hypotheses	Identifying gaps in existing literature	Conducting statistical analysis	3
7	What is plagiarism in scientific writing?	1	Quoting sources with	Using one's own ideas	Copying someone else's	All of the above	4
8	A _____ is a collection of articles, abstracts, scientific proceedings, books, citations etc. that is organized so that it can easily be accessed while doing literature	1	Database	Critical appraisal	Hard disk	Index	1

9	What is the purpose of the Institutional Ethics Committee in research?	1	Peer reviewing grants proposal for suitability for the funding agencies	Providing technical approval of the research	Provide administrative approval of the research	Approving research protocols to ensure participant safety and ethical conduct	4
10	A research participant is allowed to withdraw from a study	1	For any reason as long as the researcher gives permission to withdraw	For any reason without any explanation	For any reason as long as it is explained to the researcher	For justifiable reasons, participants can withdraw from the study	2
11	Which of the following statements is incorrect	1	A good research question should be Feasible, Interesting, Novel,	A good research question should be in epidemiological terms	A good research question facilitates to choose optimal design	A good research question will focus on one issue	2
12	What is confidentiality in research?	1	Keeping participants' identities and data confidential	Sharing participants' personal information with others	Publishing research findings without consent	Not keeping personal information safe and private	1
13	What is peer review in scientific publishing?	1	Review by editors	Publish without review	Ignoring feedback from	Reviewing articles by experts for accuracy and quality before publication	4

14	What is indexed Journal?	1	Journal whose abstracts and/or full-texts are indexed/stored in scientific databases such as Scopus, PubMed, Web of Science	Journals which are recommended by researchers	Journal who has editorial board	Journal published by well-known publishers	1
15	Which of the following review is NOT essential before initiating a clinical trial?	1	Scientific review	Peer review	Regulatory review	Ethics review	2
16	The main concept behind doing research is to	1	Study and explore knowledge	Start with a predefined and clear-cut objectives.	Get new ideas	All of them	4
17	What is the purpose of citing sources in scientific writing?	1	Giving credit to original authors	Avoiding plagiarism	Allowing readers to verify information	All of the above	4
18	How are references typically formatted in health sciences writing?	1	As per author's knowledge	Use of proper English	Use of standard referencing style	Use of vernacular language	3
19	A quantitative research design typically relies on	1	Numbers	Participants' experiences	Open-ended interview questions	Observations	1
20	Which of the following is not part of ethics review of a project?	1	Informed consent document and procedure	Competence of researcher and institute conducting research	Sharing and protection of intellectual property	Submission of brief report to IEC after completion of study	3
21	Which of the following is NOT a characteristic of qualitative research?	1	Focuses on understanding the meaning behind actions and behaviours	Utilizes open-ended questions	Collecting data through in-depth interview	Collecting data through questionnaire	4

22	What is a common myth about grant writing?	1	Grant writing does not require any specialized skills or knowledge	Only large and reputed organizations can secure grants	Grants are easy to obtain and require minimal effort to write	All of the above	4
23	Which of the following is step of research?	1	Identify data needs and spell out the research question	Formulate the objective and design the study	Draw conclusion and give recommendation to stakeholders	All of the above	4
24	Sample size estimation is not essential in	1	Qualitative research	Prevalence estimation studies	Randomized control trials	Quantitative research	1
25	The fundamental statistical indicator is	1	Mean	Median	Variance	None of the above	1
26	Which of the following will best describe the scientific inquiry that seeks to understand the acceptability and functionality of a health programme?	1	Basic science research	Translational research	Clinical research	Implementation research	4
27	The median of a series of numerical values is	1	Value for which half of the values are higher and half of the values are lower	The value located exactly midway between the minimum and maximum of the series	The most commonly encountered values among the series	A measure of the eccentricity of the series	2
28	Which is the best source of information on 'effect modifiers' while exploring cause and effect relationship in a research study?	1	Deductive thinking	Thorough review of literature	Intelligent guessing	Discussing with experienced researchers	2
29	Results of a test were given as very satisfied, satisfied, dissatisfied it represents	1	Nominal Scale	Ordinal Scale	Interval Scale	Ratio Scale	2
30	What is null hypothesis?	1	Hypothesis of no change	Hypothesis of change	Hypothesis of positive outcomes	None of these	1

31	Single Blinding is	1	Only Participant is not aware to which group he belong	Both Participant and Physician are not aware to which group they belong	Participant , Physician and Evaluator are not aware to which group they belong	None	1
32	Most important ingredient of RCT is	1	Randomization	Matching	Selection of Reference population	None of the above	1
33	What is appropriate for sample and sample size?	1	Should be representative of the population [External validity or generalizability]	Should be adequate [power to draw meaningful inferences]	Both 'a' and 'b'	Neither 'a' nor 'b'	3
34	Identify the CORRECT statement about research study	1	Research findings must be approved by the funder	Research finding must be error free	Adequate sample size is a prerequisite	Pilot study can be done during data analysis stage	3
35	Medical Subject Headings (MeSH) is a controlled vocabulary thesaurus used for indexing articles in	1	PubMed	Google scholar	Scopus	Health on Net	1
36	A random sample is a selection of participants from a population where	1	Participants are chosen based on specific characteristics	Every member of the population has an equal chance of being selected	Only few volunteers are included in the study	The researcher chooses participants based on convenience	2
37	Data analysis in research involves	1	Simply collecting data without interpretation	Summarizing of the data	Organizing, summarizing, and interpreting data	Discarding data that does not support the hypothesis	3

38	When two coins are tossed together then probability of getting no tail is	1	30%	50%	40%	60%	2
39	Which of the following is the Objective of the Research?	1	To become familiar with a phenomenon	To test a hypothesis of a causal relationship between variables	To determine the frequency with which something occurs or with it is associated with something else	All	4
40	Sampling is advantageous as it _____	1	Saves time	Saves resources	Increases validity of the findings	a & b	4
41	What is the purpose of scientific writing?	1	Entertaining readers	Providing information	Communicating research findings to scientific community and the society	Selling research	3
42	Being able to extend findings from a sample population to the whole population is associated with which of the following	1	Validity	reliability	triangulation	generalisability	4
43	Which of the following is non-probability sampling?	1	Random	Stratified	Cluster	Snow-ball	4
44	Which of the following research methods is a qualitative method of data gathering?	1	Survey	Controlled experiments	Standardised questionnaire	In-depth interview	4
45	What is a dependent variable in research?	1	The variable that is manipulated by the researcher	The variable that remains constant	The variable that is controlled by the researcher	Variable that can be directly influenced by other variable/s	4
46	Depth of the research can be judged by	1	Research title	Research objectives	Problem statement	Conclusions	2

47	What does the term 'longitudinal design' mean?	1	A study completed far away from where the researcher lives	A study that is very long to read	A study with two contrasting cases	A study completed over a distinct period of time to map changes	4
48	Which of the following can be used to represent the duration, timeline and sequence of activities and milestones of a research project?	1	Bar chart	Histogram	Gantt chart	Pie chart	3
49	What is not a grey literature?	1	Peer reviewed Journal articles	Dissertation / thesis	Publicly available programme reports	Websites/ blogs	1
50	Who is primarily accountable for resource allocation and time management in a study?	1	Institute where the research is conducted	Principal investigator	Funding agency	Scientific committee	2