

Department of Biotechnology
Course for S.Y. B.Sc. Computer Science
Paper VIII-Research methodology Sample Question Bank
(Correct Answers are marked by Red)

1.	The search for knowledge through an objective and systematic method of finding a solution to a problem is _____.		
a.	Survey	c.	Research
b.	Search	d.	None of these
2.	_____ is a type of investigation focused on understanding a particular phenomenon, study or law of nature.		
a.	Applied Research	c.	Descriptive research
b.	Fundamental research	d.	Quantitative Research
3.	The responses collected are essentially non-numerical in ____ research.		
a.	Applied Research	c.	Descriptive research
b.	qualitative research	d.	Quantitative Research
4.	A research that is based on observation and measurement of phenomena, as directly experienced by the researcher is called ____ research.		
a.	Empirical Research	c.	Fundamental research
b.	Conceptual research	d.	Applied Research
5.	_____ aims at finding a solution for an immediate problem facing a society or an industrial/business organization.		
a.	Descriptive research	c.	Empirical research
b.	Quantitative Research	d.	Applied research
6.	What motivates a researcher to take a research:		
a.	Desire to get a research degree	c.	intellectual joy
b.	Monetary benefits	d.	All of these
7.	Which may not be an objective of research:		
a.	Generate a new knowledge	c.	Test a hypothesis
b.	Analyze a general issue	d.	jealousy

8.	it is not a part of the research process:		
a.	Formulating a problem	c.	Developing hypothesis
b.	Oral presentation	d.	Research design
9.	_____ is tentative assumption made in order to draw out and test its logical or empirical consequences.		
a.	Hypothesis	c.	Survey
b.	Data	d.	Interpretation
10.	for Preparing the research design one should consider:		
a.	Time	c.	Skills
b.	Cost	d.	All of these
11.	_____ data can be collected either through experiment or through survey.		
a.	Secondary	c.	Primary
b.	Binary	d.	All of these
12.	In the case of a survey, data can be collected by _____		
a.	Personal interview	c.	Telephone interviews
b.	experimentation	d.	both a and c
13.	List of books, journals, reports is called as _____		
a.	Index	c.	acknowledgement
b.	Bibliography	d.	Hypothesis
14.	Which is not a criteria for good research		
a.	Problem is well defined	c.	Honesty
b.	Results are not reproducible	d.	Citation
15.	Good research is :		
a.	logical	c.	both a and b
b.	empirical	d.	costly
16.	Public reports are _____.		
a.	Simple	c.	Clear
b.	Attractive	d.	All of these

17	This is not a feature of the technical report_____.		
a.	Simple	c.	attractive
b.	complicated	d.	both a and c
18	Industry reports are the example of _____.		
a.	technical report	c.	medical report
b.	public report	d.	general report
19	The main drawback of oral presentation is :		
a.	Speaking skills	c.	Hesitation
b.	no permanent record	d.	Lots of suggestions
20	The main benefit of oral presentation is :		
a.	Give-and-take decisions	c.	Stealing ideas of others
b.	No plagiarism	d.	All of these
21	Formulating the Research Problem is the_____ step of the research process.		
a.	First	c.	Middle
b.	Second	d.	Last
22	Which of the following subject should not be chosen while selecting the Research Problem_____.		
a.	Subject which is overdone	c.	Controversial subject
b.	Too narrow or too vague problems	d.	All of them
23	_____are the specific difficulties or hurdles that one faces during the research process.		
a.	Personal problem	c.	Academic problem
b.	Research problem	d.	Social problem
24	Statement of the problem in a general way, is one of the _____involved in defining a research problem.		
a.	Technique	c.	Step
b.	Method	d.	None of these
25	The researcher can himself state the problem or he can seek the guidance of the_____.		
a.	Guide	c.	Friends

b.	Subject expert	d.	Both 'a' and 'b'
26.	After identifying and defining the Research problem researcher must arrange his ideas in order and write them in the form of an experimental plan or what can be described as _____.		
a.	Research process	c.	Research Plan
b.	Research work	d.	None of these
27.	_____ are those which have already been collected and analyzed by someone else.		
a.	Secondary data	c.	Statistical data
b.	Primary data	d.	Quantitative data

28.	The _____ are those which are collected afresh and for the first time, and thus happen to be original in character.		
a.	Secondary data	c.	Statistical data
b.	Primary data	d.	Quantitative data
29.	_____ should be clearly stated in a line or two which tells exactly what it is that the researcher expects to do.		
a.	Research objective	c.	Research Results
b.	Research Method	d.	Research process
30.	Which of the following are the methods of primary data collection _____.		
a.	Observation method	c.	Interview method
b.	Through questionnaires & schedules	d.	All of them
31.	A _____ consists of a number of questions printed or typed in a definite order on a form or set of forms.		
a.	Research	c.	Questionnaire
b.	Data	d.	Result
32.	Before using secondary data, researchers must see that the data possesses which of the following characteristics _____.		
a.	Reliability of data	c.	Adequacy of data
b.	Suitability of data	d.	All of them
33.	The _____ of collecting data involves presentation of oral-verbal stimuli and reply in terms of oral-verbal responses.		
a.	Interview method	c.	Survey method
b.	Observation method	d.	None of these

34.	_____ is essentially an intensive investigation of the particular unit under consideration.		
a.	Case study	c.	Field study
b.	Experiment study	d.	Survey study
35.	_____ refers to the task of drawing inferences from the collected facts after an analytical and/or experimental study.		
a.	Interpretation	c.	Result
b.	Data collection	d.	Conclusion
36.	State true or false: Researcher must not be in a hurry while interpreting results.		
a.	True	c.	-
b.	False	d.	-
37.	Which of the following PRECAUTIONS should be taken during interpretation_____.		
a.	Data are appropriate	c.	Data reflect good homogeneity
b.	Proper data analysis	d.	All of them
38.	_____ can arise due to false generalization and/or due to wrong interpretation of statistical measures.		
a.	Errors	c.	Results
b.	Questions	d.	None of these
39.	It is only through _____, the researcher can expose relations and processes that underlie his findings.		
a.	Interpretation	c.	Observation
b.	Experiment	d.	Results
40.	State true or false: Researchers can better appreciate only through interpretation.		
a.	True	c.	-
b.	False	d.	-
41.	What is the primary purpose of research design?		
a.	Collection of data only	c.	Arrangement of conditions for data collection and analysis
b.	Analysis of data only	d.	Presentation of research findings
42.	Which characteristic is NOT associated with a good research design?		

a.	Flexibility	c.	Efficiency
b.	Maximum bias	d.	Economy
43.	Which concept refers to a variable that depends on other variables?		
a.	Dependent variable	c.	Extraneous variable
b.	Independent variable	d.	Control variable
44.	What is the purpose of controlling extraneous variables in research?		
a.	To increase bias	c.	To create confounded relationships
b.	To enhance reliability	d.	To manipulate independent variables
45.	In non-experimental hypothesis-testing research, which variable is not manipulated?		
a.	Independent variable	c.	Extraneous variable
b.	Dependent variable	d.	Control variable
46.	What is the primary purpose of experimental units?		
a.	Data collection	c.	Application of treatments
b.	Data analysis	d.	Selection of samples
47	Which type of experiment compares the impact of multiple factors?		
a.	Absolute experiment	c.	Extraneous experiment
b.	Comparative experiment	d.	Control experiment
48	Which characteristic is NOT associated with a good research design?		
a.	Tailored to the research problem	c.	Maximizes experimental error
b.	Considers available resources	d.	Aligns with research objectives
49	What is the primary objective of exploratory research studies?		
a.	Testing hypotheses	c.	Describing characteristics of individuals or groups
b.	Developing problem formulations or hypotheses	d.	Determining the frequency of occurrences
50	Which method is NOT typically used in exploratory research design?		
a.	Literature survey	c.	Analysis of 'Insight-Stimulating' Examples
b.	Experience survey	d.	Experimental studies
51	Which principle of experimental design involves repeating the basic experiment for all treatments?		

a.	Replication	c.	Local control
b.	Randomization	d.	Literature survey
52	What is the purpose of randomization in experimental designs?		
a.	To assign treatments to experimental units randomly	c.	To decrease experimental error variability
b.	To increase bias	d.	To ensure a balanced arrangement of treatments
53	Which step is NOT involved in descriptive/diagnostic study design?		
a.	Bias protection	c.	Method selection
b.	Pretesting data collection instruments	d.	Conducting literature surveys
54	What is the primary aim of local control in experimental designs?		
a.	To ensure a balanced arrangement of treatments	c.	To increase bias
b.	To reduce experimental error variability	d.	To eliminate the need for replication
55	Why are research reports considered vital in the research process?		
a.	To complete the research process	c.	To communicate insights effectively
b.	To ensure findings reach their full potential	d.	All of the above
56	What is the purpose of preparing the final outline in report writing?		
a.	To analyze the subject matter logically	c.	To prepare the rough draft
b.	To create a structured framework	d.	To compile the bibliography
57	What is the main focus of rewriting and polishing in report writing?		
a.	Creating the rough draft	c.	Reviewing and revising for clarity and coherence
b.	Compiling the bibliography	d.	Adding illustrations and examples
58	What is the correct order for listing books and pamphlets in the bibliography?		
a.	Title, author's name, place of publication, date of publication	c.	Place of publication, author's name, title, date of publication
b.	Author's name, title, date of	d.	Date of publication, place of

	publication, place of publication		publication, author's name, title
59	What is the layout of a research report comprised of?		
a.	Preliminary pages, appendices, index	c.	Introduction, results, implications
b.	Main text, bibliography, acknowledgments it	d.	Preliminary pages, main text, end matter
60	What is the primary purpose of the summary section in a research report?		
a.	To outline the research methodology	c.	To present statistical summaries
b.	To summarize the main findings and conclusions	d.	To compile the bibliography
