National Testing Agency

Research in Technical Education 28th

Question Paper Name :	August 2021 Shift 1	
Subject Name :	Research in Technical Education	
Creation Date :	2021-08-28 19:32:20	
Duration :	180	
Total Marks :	100	
Display Marks:	Yes	

K	kesearch in Techni	cal Education
Group Number :		1
Group Id :		603489207
Group Maximum Duration	on:	0
Group Minimum Duratio	on:	120
Show Attended Group?:		No
Edit Attended Group? :		No
Break time :		0
Group Marks :		100
Is this Group for Examin	er?·	No

Research in Technical Education-1

Section Id: 603489307 **Section Number:**

Section type: Online

Mandatory or Optional: Mandatory Number of Questions: 100

Number of Questions to be attempted: 100

Section Marks: 100

Enable Mark as Answered Mark for Review and

Clear Response:

Yes

Sub-Section Number: 1

Sub-Section Id: 603489545

Question Shuffling Allowed : Yes

Question Number: 1 Question Id: 60348914797 Question Type: MCQ Option Shuffling: No Is

Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The application of scientific method of research for finding solutions of education problem is referred to as:

- 1. Science
- 2. Knowledge
- 3. Problem solving
- 4. Education research

Options:

60348955577.1

60348955578.2

60348955579.3

60348955580.4

Question Number: 2 Question Id: 60348914798 Question Type: MCQ Option Shuffling: No Is

Question Mandatory: No

Research that focuses on fundamental, underlying structures and processes is referred to as:

- 1. Basic
- 2. Applied
- 3. Action
- 4. Evaluation

Options:

60348955581.1

60348955582. 2

60348955583.3

60348955584.4

Question Number: 3 Question Id: 60348914799 Question Type: MCQ Option Shuffling: No Is

Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Speculations about the relationship between two or more variables are called:

- 1. Theory
- 2. Hypothesis
- 3. Principle
- 4. Construct

Options:

60348955585.1

60348955586. 2

60348955587.3

60348955588.4

Question Number: 4 Question Id: 60348914800 Question Type: MCQ Option Shuffling: No Is

Question Mandatory: No

When the researcher has a high expectation concerning the relationship between two variables, it is most appropriate to:

- 1. Research questions
- 2. Null hypothesis
- 3. Non-directional hypothesis
- 4. Directional hypothesis

Options:

60348955589.1

60348955590.2

60348955591.3

60348955592.4

Question Number: 5 Question Id: 60348914801 Question Type: MCQ Option Shuffling: No Is

Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

There is no difference in the extent of utilization of mobile phones per day by the students in the age group of 6-14 and 15-25 years is an example of:

- 1. Research question
- 2. Null hypothesis
- 3. Directional hypothesis
- 4. Non-directional hypothesis

Options:

60348955593.1

60348955594. 2

60348955595.3

60348955596.4

Question Number: 6 Question Id: 60348914802 Question Type: MCQ Option Shuffling: No Is

Question Mandatory: No

Which of the following is not a descriptive study?

- 1. Profile of teachers working in IITs in India.
- 2. Strategies adopted by award winning industries to capture markets.
- 3. Mechanical aptitude of students of mechanical engineering in the state of Himachal Pradesh.
- Effect of feedback and reinforcement on the achievement motivation of learners of Electronics & Communication Engineering

Options:

60348955597. 1

60348955598.2

60348955599.3

60348955600.4

Question Number: 7 Question Id: 60348914803 Question Type: MCQ Option Shuffling: No Is

Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

A teacher is interested in improving his/her classroom practice by introducing ICT based formative evaluation of learners. He/she will prefer:

- 1. Action research
- 2. Applied research
- 3. Basic research
- 4. Evaluation research

Options:

60348955601.1

60348955602.2

60348955603.3

60348955604.4

Question Number: 8 Question Id: 60348914804 Question Type: MCQ Option Shuffling: No Is

Question Mandatory: No

Which of the following is NOT a research question related to the study on "Content analysis of last five years question papers of Electrical Engineering of XYZ Technical University"

- 1. What is the extent of coverage of syllabus?
- 2. What is the difference in the achievement scores of boys and girls?
- 3. What are the various levels of capabilities assessed?
- 4. Is the allocation of marks appropriate?

Options:

60348955605.1

60348955606.2

60348955607.3

60348955608.4

Question Number: 9 Question Id: 60348914805 Question Type: MCQ Option Shuffling: No Is

Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The major difference between research objectives and research questions is:

- Research objectives are derived from purpose and research questions are derived from research objectives
- 2. Research objectives are stated in question form and research questions are stated in statement form
- Research objectives are stated in statement form and research questions are stated in question form
- Research objectives are what you intend to study and research questions are tentative solution to the problem

Options:

60348955609. 1

60348955610. 2

60348955611.3

60348955612.4

Question Number: 10 Question Id: 60348914806 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

While evaluating a research problem, the researcher should NOT consider its:

- 1. Size
- 2. Worthwhileness
- 3. One's own capabilities
- 4. Size of the sample

Options:

60348955613.1

60348955614. 2

60348955615.3

60348955616.4

Question Number: 11 Question Id: 60348914807 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The source of information that includes description of education research by an author who was not direct observer or participant is called:

- 1. Primary source
- 2. Secondary source
- 3. Preliminary source
- 4. Review

Options:

60348955617.1

60348955618. 2

60348955619.3

60348955620.4

Question Number: 12 Question Id: 60348914808 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

If an author of a book reports about his own experiment and its findings, that portion of book becomes:

- 1. Preliminary source
- 2. Primary source
- 3. Secondary source
- 4. Review

Options:

60348955621.1

60348955622.2

60348955623.3

60348955624.4

Question Number: 13 Question Id: 60348914809 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The initial step in conducting review of related literature will be to:

- 1. Make a list of key words
- 2. Take notes on research article
- 3. Check the preliminary sources
- 4. Study review article for the study

Options:

60348955625.1

60348955626.2

60348955627.3

60348955628.4

Question Number: 14 Question Id: 60348914810 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Which of the following studies would use the design of longitudinal studies?

- 1. Follow-up study of graduates from IITs.
- 2. Change in Knowledge and skill set of students of Civil Engineering during four years of study in BITS, Pillani
- 3. Both are the examples of longitudinal study.
- 4. None of these is an example of longitudinal study

Options:

60348955629.1

60348955630.2

60348955631.3

60348955632.4

Question Number: 15 Question Id: 60348914811 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

If a teacher is interested in generalizing the factors that lead to drug addiction, the researcher would prefer undertaking:

- 1. Survey study
- 2. Correlation study
- 3. Multiple case studies
- 4. Ex-post Facto study

Options:

60348955633.1

60348955634. 2

60348955635.3

60348955636.4

Question Number: 16 Question Id: 60348914812 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Before undertaking an experimental study, the researcher should determine:

- 1. Factors affecting the independent variable
- 2. The relationship between the independent and dependent variable
- 3. Tentative cause and effect relationship
- 4. In-depth study of the variables

Options:

60348955637.1

60348955638.2

60348955639.3

60348955640.4

Question Number: 17 Question Id: 60348914813 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

While undertaking case study research on changes that occurred in the institute on becoming a Deemed-to-be University, the researcher needs to gather data/information from:

- 1. Documents related to various aspects of the institute
- 2. Interviews of the faculty & staff
- 3. Physical artifacts
- 4. All of these are correct

Options:

60348955641.1

60348955642.2

60348955643.3

60348955644.4

Question Number: 18 Question Id: 60348914814 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Which one of the following is a relevant research question for a study on Acceptability of Graduates in Computer Science by the IT Industry?

- 1. In which type of industry-large or medium scale the acceptability of graduates is more?
- 2. What are the reasons for low acceptability of graduates by the MNCs?
- 3. Both are relevant research questions
- 4. No one is a relevant research question

Options:

60348955645.1

60348955646.2

60348955647.3

60348955648.4

Question Number: 19 Question Id: 60348914815 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Which of the following is not a characteristic of a case study?

- 1. It is an in-depth investigation of a phenomena
- 2. Includes representative sample from the population
- 3. Involves study of multiple variables
- 4. Collects data from multiple sources

Options:

60348955649.1

60348955650. 2

60348955651.3

60348955652.4

Question Number: 20 Question Id: 60348914816 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Follow up studies are examples of:

- 1. Correlation research
- 2. Ex-post Facto research
- 3. Experimental research
- 4. Longitudinal studies

Options:

60348955653.1

60348955654.2

60348955655.3

60348955656.4

Question Number: 21 Question Id: 60348914817 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Review of related literature in a thesis is a:

- 1. Preliminary source
- 2. Primary source
- 3. Secondary source
- 4. Critical evaluation of past research

Options:

60348955657.1

60348955658.2

60348955659.3

60348955660.4

Question Number: 22 Question Id: 60348914818 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Which one of the following is the right way of writing reference of a journal article as per APA style?

- 1. Malhotra, M.M. (2016). Formative evaluation in engineering education. *The International Journal of Higher Education*, 43:2, 204-212
- 2. Malhotra, M.M. (2016). Formative evaluation in engineering education. The International Journal of Higher Education, 43:2, 204-212
- 3. Malhotra, M.M. (2016). Formative evaluation in engineering education. The International Journal of Higher Education, 43:2, 204-212
- 4. Malhotra, M.M. Formative evaluation in engineering education. *The International Journal of Higher Education (2016), 43:2, 204-212.*

Options:

60348955661.1

60348955662.2

60348955663.3

60348955664.4

 ${\bf Question\ Number: 23\ Question\ Id: 60348914819\ Question\ Type: MCQ\ Option\ Shuffling: None of the Control of the Contr$

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

If a research report is written by five authors, the first time it appears in text, as per APA, would you include:

- 1. first name with et. al.
- 2. only the first author
- 3. last author only
- 4. last name of all the authors

Options:

60348955665.1

60348955666, 2

60348955667.3

60348955668.4

Question Number: 24 Question Id: 60348914820 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Which of the studies would follow ex-post facto research design?

- 1. Effect of socio-economic-status on the performance of students in vocational programmes.
- 2. Effect of direct instructional time on performance
- 3. Effect of the frequency of testing on the performance of students
- 4. Effect of learning through programmed instruction on performance.

Options:

60348955669.1

60348955670.2

60348955671.3

60348955672.4

Question Number: 25 Question Id: 60348914821 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The step 'Describe Methodology of Research' includes:

- Selecting research design, administering instruments, and the procedure for conducting research
- Generating hypotheses, selecting research design, selecting sample, and the procedure for conducting research
- 3. Selecting research design, selecting sample, selecting instruments, statistical techniquesto be used
- Defining variables in the problems, selecting sample, selecting instruments, and the procedure of conducting research

Options:

60348955673.1

60348955674. 2

60348955675.3

60348955676, 4

Question Number: 26 Question Id: 60348914822 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

In an experimental research, subjects are randomly assigned to groups so that:

- 1. Equivalent groups are compared on the treatment condition
- 2. Non-equivalent groups are treated in the experiment
- 3. Minimize history threat to internal validity
- 4. The post test only design can be used

Options:

60348955677. 1

60348955678.2

60348955679.3

60348955680.4

Question Number: 27 Question Id: 60348914823 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

If the correlation between achievement scores in twelfth class and entrance examination is positive, it means:

- Higher the achievement scores in twelfth class, higher will be the scores in entrance examination.
- Lower the achievement scores in twelfth class, higher will be the achievement scores in entrance examination
- 3. Higher the achievement scores in class twelfth, lower will be the achievement scores in the entrance examination.
- 4. With the increase in achievement scores in class twelfth, there will be no change in achievement scores in entrance examination.

Options:

60348955681.1

60348955682. 2

60348955683.3

60348955684.4

Question Number: 28 Question Id: 60348914824 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Which of the following qualify to be the research objectives of a correlation study?

- To study the effect of parental education on highest level of the education obtained by their children.
- 2. To study the effect of demographic variables on the highest qualification attained by the population between 25-45 years.
- 3. Both are the research objectives of a correlation study.
- 4. None of these is the research objective of a correlation study.

Options:

60348955685.1

60348955686.2

60348955687.3

60348955688.4

Question Number: 29 Question Id: 60348914825 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

In a study on "Predicting effectiveness as team member on the basis of interpersonal skills and communication effectiveness", which are the predictor variables?

- 1. Effectiveness of team member and communication effectiveness
- 2. Effectiveness of team member and interpersonal Skills
- 3. Interpersonal skills and communication effectiveness
- 4. Team member effectiveness, interpersonal skills and communication effectiveness

Options:

60348955689.1

60348955690.2

60348955691.3

60348955692.4

Question Number: 30 Question Id: 60348914826 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Which of the following studies is an example of correlation research?

- 1. Effect of active learning strategies on the achievement and team building skills of students.
- Qualification and Experience of faculty working in diploma level institutions in the state of Haryana.
- 3. Effect of parental education and socio-economic status on the performance of students in Board Examination.
- Predicting job success of engineers on the basis of their performance in four year degree programme.

Options:

60348955693.1

60348955694.2

60348955695.3

60348955696.4

Question Number: 31 Question Id: 60348914827 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

For a perfect correlation, the value of r will be:

- 1. + 1.00
- 2. -1.00
- 3. +1.00 and -1.00, both
- 4. Neither +1.00 nor -1.00

Options:

60348955697.1

60348955698. 2

60348955699.3

60348955700.4

Question Number: 32 Question Id: 60348914828 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Which of the following is an example of directional hypothesis for a correlation study?

- 1. There is no significant correlation between anxiety and achievement of students.
- 2. There is a significant negative correlation between anxiety and achievement of students.
- 3. There is a significant correlation between anxiety and achievement of students.
- 4. Anxiety is not significantly related to achievement of students

Options:

60348955701.1

60348955702.2

60348955703.3

60348955704.4

Question Number: 33 Question Id: 60348914829 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

In case you have a small group of faculty of ten in your department. You would like to determine the relationship between their aptitude for teaching and teaching effectiveness, which correlation technique would you prefer?

- 1. Pearson product moment
- 2. Chi-square
- 3. Rank order correlation
- 4. Point bi-serial correlation

Options:

60348955705.1

60348955706.2

60348955707.3

60348955708. 4

Question Number: 34 Question Id: 60348914830 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

In case the study involves prediction of social interaction on the basis of communication effectiveness, confidence, and level of education, which statistical technique will you prefer.

- 1. Chi-square
- 2. Multiple regression
- 3. Pearson product moment correlation
- 4. Rank order correlation

Options:

60348955709.1

60348955710.2

60348955711.3

60348955712.4

Question Number: 35 Question Id: 60348914831 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

In a study on Job Satisfaction and Stress, the data will be generated on a/an:

- 1. Nominal scale
- 2. Ordinal scale
- 3. Interval scale
- 4. Ratio scale

Options:

60348955713.1

60348955714.2

60348955715.3

60348955716.4

Question Number: 36 Question Id: 60348914832 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Ex-Post Facto research study would be preferred over an experimental method where:

- 1. Independent variable can be manipulated
- 2. Independent variable cannot be manipulated
- 3. Standardized test can be used
- 4. Standardized test cannot be used

Options:

60348955717.1

60348955718.2

60348955719.3

60348955720.4

Question Number: 37 Question Id: 60348914833 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

As a head of the institution, you find that in second year there were apparent differences in the achievement scores of students who joined engineering programme after twelfth and who joined through lateral entry. Which of the following approach you would follow:

- 1. Case study
- 2. Experimental research
- 3. Ex-post Facto research
- 4. Correlational research

Options:

60348955721.1

60348955722.2

60348955723.3

60348955724.4

Question Number: 38 Question Id: 60348914834 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

If intact classes are taken for studying the effect of training in creative problem solving on the problem solving ability of first year students of engineering in a class, the design of research will be:

- 1. True experimental design
- 2. Pseudo experimental design
- 3. Quasi experimental design
- 4. Pretest-posttest control group design

Options:

60348955725.1

60348955726.2

60348955727.3

60348955728.4

Question Number: 39 Question Id: 60348914835 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

A teacher is not satisfied with student involvement in her class. She wants to implement new strategy to enhance student involvement and on the basis of results would like to bring more changes in her strategy. She is involved in:

- 1. Basic research
- 2. Applied research
- 3. Action research
- 4. Evaluation research

Options:

60348955729.1

60348955730. 2

60348955731.3

60348955732.4

Question Number: 40 Question Id: 60348914836 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

The findings of an action research undertaken on first year students of electrical engineering will be applicable on the;

- 1. All the students in the first year studying in different institutions
- 2. The students on whom the study was conducted
- 3. All the first year students studying in the same college
- 4. On all students across disciplines of the same college

Options:

60348955733.1

60348955734.2

60348955735.3

60348955736.4

Question Number: 41 Question Id: 60348914837 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Any variable on which the measure is taken in order to determine whether the experimental condition has an effect is referred to:

- 1. Dependent variable
- 2. Extraneous variable
- 3. Independent variable
- 4. Control variable

Options:

60348955737.1

60348955738.2

60348955739.3

60348955740.4

Question Number: 42 Question Id: 60348914838 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Which of the following factors can affect internal validity of an experiment?

- 1. Maturation
- 2. History
- 3. Differential selection
- 4. All of these factors can affect

Options:

60348955741.1

60348955742.2

60348955743.3

60348955744.4

Question Number: 43 Question Id: 60348914839 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Which one of the following makes Ex-Post Facto research different from experimental research?

- 1. Scales of measurement used for measuring variables
- 2. Size of sample selected for comparison
- 3. Type of relationship established
- 4. Types of statistical techniques used

Options:

60348955745.1

60348955746.2

60348955747.3

60348955748.4

Question Number: 44 Question Id: 60348914840 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Which one of the following questions can be answered by research?

- 1. Is the practical work at degree level justified?
- 2. How IIT Bombay is able to forge international collaborations for research?
- 3. Should physical education be made a part of curriculum?
- 4. Do students of computer Science & Engineering need industrial training?

Options:

60348955749.1

60348955750.2

60348955751.3

60348955752.4

Question Number: 45 Question Id: 60348914841 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The variable of job satisfaction classified in three different categories-High, Average and Low is an example of:

- 1. Nominal scale
- 2. Ordinal scale
- 3. Interval scale
- 4. Ratio scale

Options:

60348955753. 1

60348955754. 2

60348955755.3

60348955756.4

Question Number: 46 Question Id: 60348914842 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

For a study on Effect of Training in Blended learning and Teaching Effectiveness of teachers, if the review of related literature is conclusive of the effect then which of the following hypotheses will be appropriate?

- There will be significant effect of training in blended learning on the teaching effectiveness
 of teachers.
- 2. There will be no significant difference in the teaching effectiveness of teachers trained in blended learning and those not trained.
- 3. Teaching effectiveness of teachers trained in blended learning is significantly higher than the teachers not trained.
- There is no significant effect of training in blended learning on teaching effectiveness of teachers.

Options:

60348955757.1

60348955758.2

60348955759.3

60348955760.4

Question Number: 47 Question Id: 60348914843 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

If you are interested in finding out whether the scores on achievement increase or decrease with increase in intelligence, you will follow:

- 1. Survey research design
- 2. Ex-post facto research design
- 3. Experimental research design
- 4. Correlation research design

Options:

60348955761.1

60348955762. 2

60348955763.3

60348955764.4

Question Number: 48 Question Id: 60348914844 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

In a study on "Readiness of learners for online learning in relation to their stream of education and gender", which of the following hypothesis can be relevant:

- There is no significant difference in the readiness for online learning of male and female learners.
- Readiness for online learning is significantly higher in case of learners from technical education than the learners from general education.
- 3. There exist significant differences in the readiness of male and female learners from general and technical education stream.
- 4. All of these are relevant hypotheses.

Options:

60348955765.1

60348955766. 2

60348955767.3

60348955768.4

Question Number: 49 Question Id: 60348914845 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

If you are interested in obtaining feedback from the alumni (comprising male and female and of various programmes) of your institution regarding the curriculum and instructional processes, which of the sampling technique would you prefer?

- 1. Simple random sampling
- 2. Stratified random sampling
- 3. Cluster sampling
- 4. Systematic sampling

Options:

60348955769.1

60348955770.2

60348955771.3

60348955772.4

Question Number: 50 Question Id: 60348914846 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Which of the following sampling technique is non-probability sampling technique?

- 1. Simple random sampling
- 2. Systematic random sampling
- 3. Quota sampling
- 4. Stratified random sampling

Options:

60348955773.1

60348955774. 2

60348955775.3

60348955776.4

Question Number: 51 Question Id: 60348914847 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

If you have 10,000 students of ECE branch in various technical institutions of your state and you want to select 20% of the sample by including every n_{th} unit, the sampling technique used is:

- 1. Quota sampling
- 2. Stratified random sampling
- 3. Systematic sampling
- 4. Purposive sampling

Options:

60348955777. 1

60348955778. 2

60348955779.3

60348955780.4

Question Number: 52 Question Id: 60348914848 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

If you are concerned with studying the reactions of teachers working at different levels of education towards National Education Policy, but you do not have complete information about the population. The preferred sampling technique would be:

- 1. Quota sampling
- 2. Stratified sampling technique
- 3. Systematic sampling technique
- 4. Purposive sampling technique

Options:

60348955781.1

60348955782.2

60348955783.3

60348955784.4

Question Number: 53 Question Id: 60348914849 Question Type: MCQ Option Shuffling: No

Is Question Mandatory : No

Correct Marks: 1 Wrong Marks: 0

If you are interested in identifying the reasons for selection of graduates in your branch of your college by the MNCs, you will prefer to select a sample of employers through:

- 1. Snowball sampling
- 2. Purposive sampling
- 3. Simple random sampling
- 4. Volunteer sampling

Options:

60348955785.1

60348955786, 2

60348955787.3

60348955788.4

Question Number: 54 Question Id: 60348914850 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

If the researcher knows that the population is large and he/she does not have knowledge about each member, he/she will prefer:

- 1. Systematic sampling
- 2. Simple random sampling
- 3. Cluster sampling
- 4. Stratified random sampling

Options:

60348955789.1

60348955790.2

60348955791.3

60348955792.4

Question Number: 55 Question Id: 60348914851 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

If a researcher wants to collect information regarding the number of courses offered, number of teachers in each discipline, and enrolment in various courses and number of students who pass out from various course, he/she should prefer the tool:

- 1. Interview schedule
- 2. Observation schedule
- 3. Questionnaire
- 4. Interview and observation schedule

Options:

60348955793.1

60348955794. 2

60348955795.3

60348955796.4

Question Number: 56 Question Id: 60348914852 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

If you are undertaking a case study of an institution which has excellent collaboration with industry and you are interested in determining the how could the institute motivate the industry for collaboration and the benefits accrued, you will prefer:

- 1. Interview schedule
- 2. Observation schedule
- 3. Both interview and observation schedule
- 4. Questionnaire and observation schedule

Options:

60348955797.1

60348955798.2

60348955799.3

60348955800.4

Question Number: 57 Question Id: 60348914853 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

In case, you want to rate the institutes in terms of facilities that exist in those institutions, you will prefer a:

- 1. Interviews
- 2. Observation schedule
- 3. Questionnaire
- 4. Questionnaire and observation schedule

Options:

60348955801.1

60348955802.2

60348955803.3

60348955804.4

Question Number: 58 Question Id: 60348914854 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

The question" Write three to four problems you encountered during planning and implementation of structured industrial training of your students" is an example of:

- 1. Multiple choice type
- 2. Multiple response type
- 3. Matching type
- 4. Open ended type

Options:

60348955805.1

60348955806.2

60348955807.3

60348955808.4

Question Number: 59 Question Id: 60348914855 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

If you want to find out the extent of agreement or disagreement with the various aspects of MOOC, which of the following style will be appropriate:

- 1. The instructor was accessible through out the course. SA A I DA SD
- 2. Did the instructor remained accessible through out the course? Yes/No
- 3. Accessibility of the instructor Always Frequently Sometimes Rarely Never
- 4. All the three styles of writing are appropriate.

Options:

60348955809.1

60348955810.2

60348955811.3

60348955812.4

Question Number: 60 Question Id: 60348914856 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

If you are interested in gathering information related to how decisions are made in an institution, you will prefer to gather information through:

- 1. Interviews
- 2. Questionnaire
- 3. Observations
- 4. Interviews and observations

Options:

60348955813.1

60348955814. 2

60348955815.3

60348955816.4

Question Number: 61 Question Id: 60348914857 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

If you are likely to seek suggestions for bringing improvements in technical education, which one of the types of questions you will prefer?

- 1. Multiple choice type
- 2. Multiple response type
- 3. Open ended type
- 4. Rating type

Options:

60348955817.1

60348955818.2

60348955819.3

60348955820.4

Question Number: 62 Question Id: 60348914858 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Observing and interpreting the non-verbal behaviour of respondents will be a skill needed in case of use of a:

- 1. Questionnaire
- 2. Observation
- 3. Interviews
- 4. Both observation & interviews

Options:

60348955821.1

60348955822. 2

60348955823.3

60348955824.4

Question Number: 63 Question Id: 60348914859 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Interviews can be:

- 1. Structured interviews
- 2. Semi-structured
- 3. Unstructured
- 4. All these are correct

Options:

60348955825.1

60348955826. 2

60348955827. 3

60348955828.4

Question Number: 64 Question Id: 60348914860 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

As a teacher, if you intend to offer remedial instruction classes to your students after the institution hours and study its effect on their achievement, you need to:

- 1. Force all weak students to attend your class
- 2. You need to seek consent of the learner
- 3. You need to take the permission of the Board
- 4. You need to extend institution hours for all

Options:

60348955829.1

60348955830.2

60348955831.3

60348955832.4

Question Number: 65 Question Id: 60348914861 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Which of the following scale has absolute zero?

- 1. Nominal scale
- 2. Ordinal scale
- 3. Interval scale
- 4. Ratio scale

Options:

60348955833.1

60348955834. 2

60348955835.3

60348955836.4

Question Number: 66 Question Id: 60348914862 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

If you arrange teachers of your department from 1 to 10 by assigning 1 to most effective teacher and 10 to least effective teacher, the data available to you is on:

- 1. Nominal scale
- 2. Ordinal scale
- 3. Interval scale
- 4. Ratio scale

Options:

60348955837.1

60348955838.2

60348955839.3

60348955840.4

Question Number: 67 Question Id: 60348914863 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

If the distribution of achievement scores in mathematics obtained by students is positively skewed, it means:

- 1. There is concentration of cases on the upper side of the scale.
- 2. There is concentration of cases on the lower side of the scale
- 3. There is concentration of cases at the middle point of the curve
- 4. None of these is correct

Options:

60348955841.1

60348955842.2

60348955843.3

60348955844.4

Question Number: 68 Question Id: 60348914864 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

If you are testing hypothesis that female teachers are significantly more patient with learners than male teachers, you will use:

- 1. One-tailed test
- 2. Two-tailed test
- 3. One-tailed and two-tailed only
- 4. Neither one-tailed nor two-tailed test

Options:

60348955845.1

60348955846. 2

60348955847.3

60348955848.4

Question Number: 69 Question Id: 60348914865 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

In case, the scores obtained by ten students on leadership scale are:

25, 27, 29, 30, 34, 36, 40, 43, 46, 88

Which measure of central tendency would you calculate?

- 1. Mean
- 2. Median
- 3. Mode
- 4. Range

Options:

60348955849.1

60348955850. 2

60348955851.3

60348955852.4

Question Number: 70 Question Id: 60348914866 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

If you are testing hypothesis that "there exists significant relationship between the attitude towards practical work and performance in practical work", which of the following value of 'r' will lead to acceptance of hypothesis?

1. r= .23 sig at .20

2. r= .35 sig. at .10

3. r=.82 sig. at .01

4. r=.15 sig. at .20

Options:

60348955853.1

60348955854.2

60348955855.3

60348955856.4

Question Number: 71 Question Id: 60348914867 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

If you are interested in finding out the dispersion of scores around mean, you will calculate:

- 1. Standard deviation
- 2. Variance
- 3. Quartile deviation
- 4. Range

Options:

60348955857.1

60348955858.2

60348955859.3

60348955860.4

Question Number: 72 Question Id: 60348914868 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

If you have enrolment data for the various courses in terms of boys and girls, which of the following graphical representation will you prefer?

- 1. Line graph
- 2. Column graph
- 3. Pie chart
- 4. Histogram

Options:

60348955861.1

60348955862. 2

60348955863.3

60348955864.4

Question Number: 73 Question Id: 60348914869 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

If your population consists of 25% teachers, 20% Doctors, 30% Engineers, 10% Lawyers, and 15% Government Employees, the graphical representation to be used will be:

- 1. Line graph
- 2. Column graph
- 3. Pie chart
- 4. Histogram

Options:

60348955865.1

60348955866.2

60348955867.3

60348955868. 4

Question Number: 74 Question Id: 60348914870 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Data gathered through a standardized test provide you scores for 600 students, the first step will be to:

- 1. Find out the median
- 2. Calculate the mean
- 3. Prepare a frequency distribution
- 4. Calculate standard deviation

Options:

60348955869.1

60348955870.2

60348955871.3

60348955872.4

Question Number: 75 Question Id: 60348914871 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

If the data are availble on nominal scale for the two variables, which of the following correlation techniques would you use?

- 1. Spearman's rho
- 2. Pearson Product Moment correlation
- 3. Bi-serial correlation
- 4. Chi-square

Options:

60348955873.1

60348955874. 2

60348955875.3

60348955876.4

Question Number: 76 Question Id: 60348914872 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

If you want to compare the creativity of your first, second and third year students and you have obtained scores on an interval scale, which of the following technique of analysis would you use?

- 1. Analysis of covariance
- 2. Analysis of variance
- 3. t-test
- 4. Multiple regression

Options:

60348955877.1

60348955878.2

60348955879.3

60348955880.4

Question Number: 77 Question Id: 60348914873 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Type I error is made:

- 1. When null hypothesis is accepted though the differences actually exist.
- 2. When null hypothesis is rejected although no significant differences exist
- 3. When the directional hypothesis is rejected although true differences exist
- 4. When the alternative hypothesis is accepted though no true actually exist

Options:

60348955881.1

60348955882.2

60348955883.3

60348955884. 4

Question Number: 78 Question Id: 60348914874 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

If the differences are significant at .01 level, it means differences are:

- 1. Not significant at .05 level
- 2. Significant at .05 level
- 3. Significant at .10 level
- 4. Significant at both .10 and .05 level

Options:

60348955885.1

60348955886.2

60348955887.3

60348955888.4

Question Number: 79 Question Id: 60348914875 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The df for a correlation coefficient calculated for a sample of 50 teachers is:

- 1.49
- 2.48
- 3.51
- 4.52

Options:

60348955889.1

60348955890. 2

60348955891.3

60348955892.4

Question Number: 80 Question Id: 60348914876 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

If the scores on a continuum of 10 to 100 are normally distributed, how many cases would normally lie between M+/-2SD.

- 1.34.13%
- 2. 68.26%
- 3, 95,44%
- 4.99.72%

Options:

60348955893.1

60348955894. 2

60348955895.3

60348955896.4

Question Number: 81 Question Id: 60348914877 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

If you are interested in finding out a score which most of the students in the class have obtained, you will find out the:

- 1. Mean
- 2. Median
- 3. Mode
- 4. Standard deviation

Options:

60348955897.1

60348955898.2

60348955899.3

60348955900.4

Question Number: 82 Question Id: 60348914878 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Which of the following should be included as an additional information in a funding research proposal?

- 1. Rationale for the problem
- 2. Objectives of the study
- 3. Methodology
- 4. Curriculum vitae of the researcher

Options:

60348955901.1

60348955902.2

60348955903.3

60348955904.4

Question Number: 83 Question Id: 60348914879 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

While writing a research report, you will consider:

- 1. Audience of the report
- 2. Purpose of the report
- 3. Research questions
- 4. Audience, Purpose and Research Questions, all

Options:

60348955905.1

60348955906.2

60348955907.3

60348955908.4

Question Number: 84 Question Id: 60348914880 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

While evaluating Analysis of Data and interpretation of Results in a research report, which of the following should be one of the criteria?

- 1. Accuracy of gaps identified
- 2. Accuracy of interpretation of results
- 3. Accuracy of definition of terms
- 4. Accuracy of sampling technique

Options:

60348955909.1

60348955910.2

60348955911.3

60348955912.4

Question Number: 85 Question Id: 60348914881 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

A funding proposal needs to be accurate, complete and persuasive because:

- 1. The problem statement in this kind of proposal is difficult to identify
- 2. The problem involves specific procedures and instruments
- 3. Its purpose is to allocate limited financial resources
- 4. It justifies the requirements for undertaking the research

Options:

60348955913.1

60348955914. 2

60348955915.3

60348955916.4

Question Number: 86 Question Id: 60348914882 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Which of the following components is a part of a research proposal?

- 1. Conclusions and recommendations
- 2. Descriptive results
- 3. Presentation of data
- 4. Research hypotheses

Options:

60348955917.1

60348955918.2

60348955919.3

60348955920.4

Question Number: 87 Question Id: 60348914883 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Which section of the proposal is intended to describe the purpose with a full statement of the research questions?

- 1. Introduction
- 2. Literature Review
- 3. References
- 4. Proposed Methodology

Options:

60348955921.1

60348955922. 2

60348955923.3

60348955924.4

Question Number: 88 Question Id: 60348914884 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Table of Contents in a report is a part of:

- 1. Appendices
- 2. Introduction
- 3. Preliminary pages
- 4. References

Options:

60348955925.1

60348955926.2

60348955927.3

60348955928.4

Question Number: 89 Question Id: 60348914885 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Emeritus fellowship scheme is of:

- 1. Department of Atomic Energy
- 2. Department of Science and Technology
- 3. University Grants Commission
- 4. AICTE

Options:

60348955929.1

60348955930.2

60348955931.3

60348955932.4

Question Number: 90 Question Id: 60348914886 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Adjunct faculty scheme is that of

- 1. UGC
- 2. DST
- 3. AICTE
- 4. CSIR

Options:

60348955933.1

60348955934.2

60348955935.3

60348955936.4

Question Number: 91 Question Id: 60348914887 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Nehru Science Post-Doctoral Research Fellowship is awarded by:

- 1. CSIR
- 2. ICMR
- 3. DST
- 4. UGC

Options:

60348955937.1

60348955938. 2

60348955939.3

60348955940.4

Question Number: 92 Question Id: 60348914888 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Raja Ramanna Fellowship is awarded by:

- 1. DRDO
- 2. DST
- 3. Department of Atomic Energy
- 4. Department of Biotechnology

Options:

60348955941.1

60348955942.2

60348955943.3

60348955944.4

Question Number: 93 Question Id: 60348914889 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Which of the following schemes are offered by AICTE?

- 1. MODROBS
- 2. Research Promotion Scheme
- 3. Research Parks
- 4. All the three schemes mentioned here

Options:

60348955945.1

60348955946.2

60348955947.3

60348955948.4

Question Number: 94 Question Id: 60348914890 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

The criteria for evaluating a chapter on Methodology should include:

- Appropriateness of design, appropriateness of sampling technique, appropriateness of research questions, appropriateness of conclusions
- Appropriateness of design, appropriateness of sampling technique, appropriateness of hypotheses, Adequacy of sample, Relevance of tools
- Appropriateness of design, adequacy of sample, appropriateness of sampling technique, , validity and reliability of tools and appropriateness of statistical techniques
- Appropriateness of design, sampling technique, appropriateness of research questions, appropriateness of hypotheses, appropriateness of tools and statistical techniques

Options:

60348955949. 1

60348955950.2

60348955951.3

60348955952.4

Question Number: 95 Question Id: 60348914891 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Conclusions in the report focus on:

- 1. Critical analysis of past research studies
- 2. Rationale for taking up the study
- 3. Methodology used in the study
- 4. Major findings related to research questions and hypotheses for the study

Options:

60348955953. 1

60348955954. 2

60348955955.3

60348955956.4

Question Number: 96 Question Id: 60348914892 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

While evaluating the abstract in a research report, one should include in the criteria:

- 1. Brevity
- 2. Completeness
- 3. Accuracy
- 4. All of these

Options:

60348955957.1

60348955958.2

60348955959.3

60348955960.4

Question Number: 97 Question Id: 60348914893 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Evaluation of research can be:

- 1. Formative
- 2. Summative
- 3. Formative & Summative, both
- 4. Neither Formative nor Summative

Options:

60348955961.1

60348955962.2

60348955963.3

60348955964.4

Question Number: 98 Question Id: 60348914894 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

You are the funding agency for a research project. The project is on the verge of completion. Which type of evaluation can you carry out:

- 1. Formative evaluation
- 2. Summative evaluation
- 3. Formative and Summative, both
- 4. Neither Formative nor Summative

Options:

60348955965.1

60348955966.2

60348955967.3

60348955968.4

Question Number: 99 Question Id: 60348914895 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

You are asked to evaluate a thesis in your area of specialization and an experimental design has been used in the study. How will you determine the internal validity of the experiment?

- 1. See that testing had no effect on the post test measure
- 2. Individuals did not differ on the pretest
- 3. Measuring instruments were reliable and valid
- 4. All of these are correct

Options:

60348955969.1

60348955970.2

60348955971.3

60348955972.4

Question Number: 100 Question Id: 60348914896 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Which is not the purpose of external evaluation of research report?

- 1. Identify the strengths and weaknesses of the report
- 2. Enhance use of findings of research
- 3. Facilitate decision making
- 4. Fund the project

Options:

60348955973.1

60348955974. 2

60348955975.3

60348955976.4