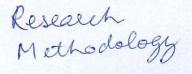
# NATIONAL INSTITUTE OF TECHNICAL TEACHERS TRAINING AND RESEARCH

## (DEEMED TO BE UNIVERSITY UNDER DISTINCT CATEGORY)

#### **CHANDIGARH**

## Ph.D Entrance Examination-January 2025

### **ANSWER KEY**



|     | Statement  |     | Correct Answer Key   |  |  |
|-----|--|-----|----------------------|--|--|
| Q1. | Prototype in research developed at the stage of:   |     |                      |  |  |
| (a) | Advocacy and screening   | (c) |                      |  |  |
| (b) | Commercialization  |     | Experimentation      |  |  |
| (c) | Experimentation  |     |                      |  |  |
| (d) | Diffusion and implementation   |     |                      |  |  |
| Q2. | Which method of research contribute most to the advancement of education psychology as a science?  | (b) | Experimental method  |  |  |
| (a) | Clinical method  |     |                      |  |  |
| (b) | Experimental method  |     |                      |  |  |
| (c) | Historical method  |     |                      |  |  |
| (d) | Survey method  |     |                      |  |  |
| Q3. | A researcher conducts a study to explore the experiences of families living in low-income neighbourhoods'. Which type of research is most suitable for this study? | (b) | Exploratory research |  |  |
| (a) | Descriptive research   |     |                      |  |  |
| (b) | Exploratory research   |     |                      |  |  |
| (c) | Diagnostic research  |     |                      |  |  |
| (d) | Evaluation research  |     |                      |  |  |
| Q4. | For a perfect positive Correlation, the value of "r" is  | (b) | + 1.0                |  |  |
| (a) | -1.0   |     |                      |  |  |
| (b) | +1.0   |     |                      |  |  |
| (c) | 0  |     |                      |  |  |
| (d) | 0.3  |     |                      |  |  |
| Q5. | On what basis did Jean Piaget give his theory of cognitive development of humans?  | b)  | Fundamental Research |  |  |
| (a) | Evaluation Research  |     |                      |  |  |
| (b) | Fundamental Research   |     |                      |  |  |
| (c) | Applied Research   |     |                      |  |  |
| (d) | Action Research  |     |                      |  |  |
| Q6. | The F-test   | (c) | Can be one-tailed as |  |  |
| (a) | Is essentially a two-tailed test.  |     | well as two-tailed   |  |  |
| (b) | Is essentially a one-tailed test.  |     | depending on the     |  |  |
| (c) | Can be one-tailed as well as two-tailed depending on the hypotheses.   |     | hypotheses           |  |  |
| (d) | Can never be one tailed test.  |     |                      |  |  |



| (a)        | a study on the effect of the level of aspiration on the achievement of technician students |       |  |
|------------|--|-------|--|
|            | of research?   |       | report for establishing a<br>National Institute of |
| Q14.       | Which one of the following is 'NOT' an example   | e (b) | preparation of a project                           |
| (d)        | Variations among variables   |       |  |
| (c)        | Regression among variables   |       |  |
| (b)        | Difference among variables   |       |  |
| (a)        | Association among variables  |       |  |
| Q13.       | is   |       | variables  |
| (d)        | The major attribute of Correlation Analysis  | (a)   | Association among                                  |
| (c)        | Research design  |       |  |
| (b)        | Research paradigm  |       |  |
| (a)        | Synopsis of Research   |       |  |
| -          | Research hypothesis  |       |  |
|            | the research is carried out is known   |       |  |
| Q12.       | The name of the conceptual framework in which  | (d)   | Research design                                    |
| (d)        | Praying to achieve an aim  | (4)   | Research design                                    |
| (c)        | Attaining an aim   |       |  |
| (b)        | Following an aim   |       |  |
| (a)        | Goal-oriented  |       |  |
|            | "Anusandhan"?  |       |  |
| Q11.       | What do you understand by the term   | (b)   | Following an aim                                   |
| (4)        | research domain  |       |  |
| (d)        | reduce the emphasis on a single subject in the   |       |  |
| (c)        | create a new trend in research methodology   |       |  |
| (b)        | bring out the holistic approach to research  |       |  |
| (a)        | over simplify the problem of research  |       |  |
| Q10.       | is to  |       | approach to research                               |
| Q10.       | The main objective of interdisciplinary research   | (b)   | To bring out the holistic                          |
| (d)        | Eliminate spurious relations   |       |  |
| (c)        | Introduce new variables  |       | relations  |
| (b)        | Confirm triangulation  |       |  |
| (a)        | Improve data interpretation  |       |  |
| Q9.        | research field is to   |       |  |
| Q9.        | The main aim of the scientific method in the   | (d)   | Eliminate spurious                                 |
| (c)<br>(d) | Schedule   |       |  |
| (c)        | Questionnaire  |       |  |
| (a)<br>(b) | Interview  |       |  |
| (a)        | Rating Scale   |       |  |
| 6          | urban area. So, what tool should he prefer for the study?                                  |       |  |
|            | prospects of a particular political party in an  |       |  |
| 28.        | variables  A researcher is interested in studying the                                      | (c)   | Questionnaire                                      |
| d)         | To understand the difference between various   |       |  |
|            | variables  |       |  |
| c)         | To understand the relationship between two   |       |  |
| b)         | To understand the difference between two variables   |       | difference between two variables                   |
| )7.<br>a)  | For setting the hypotheses   |       |  |
|            | What is the use of Factorial Analysis?   | (b)   | difference batternan time                          |



| (b)  | preparation of a project report for establishing a National Institute of Technical Teacher Training in a                                     |          | Technical Teacher<br>Training in a country   |  |
|------|--|----------|--|--|
|      | country  |          |  |  |
| (c)  | a survey of the job requirements of instruments  |          |  |  |
| (d)  | engineering technicians in a country development of learning modules on construction   |          |  |  |
| (u)  | management and testing their effectiveness in regard to achievement and attitudes of civil engineering students                              |          |  |  |
| Q15. | The step 'Describe Methodology of Research' includes   | (c)      | selecting sample<br>selecting instruments<br>selecting research  |  |
| (a)  | selecting research design, administering instruments, and the procedure for conducting research  |          | design, methods of analysis to be used and the procedure for conducting research   |  |
| (b)  | generating hypotheses, selecting research design, selecting sample, and the procedure for conducting research                                |          | conducting research  |  |
| ( c) | selecting sample, selecting instruments, selecting research design, methods of analysis to be used and the procedure for conducting research |          |  |  |
| (d)  | defining variables in the problems, selecting sample, selecting instruments, and the procedure of conducting research                        |          |  |  |
| Q16. | Which type of research is often used to measure  | (d)      | Cross-sectional  |  |
|      | the characteristics of a population or   | ( -/     | research   |  |
|      | phenomenon at a single point in time?  |          |  |  |
| (a)  | Descriptive research   |          |  |  |
| (b)  | Exploratory research   |          | and the second second  |  |
| (c)  | Diagnostic research  |          |  |  |
| (d)  | Cross-sectional research   |          |  |  |
| Q17. | A researcher conducts a study to assess the effectiveness of a counselling program for   | (d)      | Evaluative research  |  |
|      | individuals dealing with grief. Which type of  |          |  |  |
|      | research is most suitable for this study?  |          |  |  |
| (a)  | Descriptive research   |          |  |  |
| (b)  | Exploratory research   |          |  |  |
| (c)  | Diagnostic research  |          | A STATE OF THE STA |  |
| (d)  | Evaluation research  |          |  |  |
| Q18. | By using a coding system on note cards, a researcher can   | ( c)     | cross-reference the note cards with original   |  |
| (a)  | collate references on similar topics   |          | sources  |  |
| (b)  | order the note cards into a sequence   |          |  |  |
| (c)  | cross-reference the note cards with original sources   |          |  |  |
| (d)  | indicate the type of information contained on each card  |          |  |  |
| Q19. | Which of the following problem situations poses a specific rather than a general research problem?   | ( d)     | How do two instructional methods differ in arc   |  |
| (a)  | How will education affect teachers?  | Orners S | welding classes?   |  |
| (b)  | How relevant are core subjects in various courses?   |          |  |  |



| (c)  | How important is the role of principals in technician education?   |        |   |
|------|--|--------|---|
| (d)  | How do two instructional methods differ in arc welding   |        |   |
| Q20. | Which one of the following variables is NOT a discrete variable?   | (a)    | Age   |
| (a)  | Age  |        |   |
| (b)  | Gender   |        |   |
| (c)  | Marital Status   |        |   |
| (d)  | Place of Residence   | (h)    | Achievement and                                 |
| Q21. | Identify the variable(s) in the following research problem: 'Effect of Problem Based Learning on achievement of +2 students in Chemistry'. | (b)    | Problem Based Learning                          |
| (a)  | Achievement  |        |   |
| (b)  | Achievement and Problem Based Learning   |        |   |
| (c)  | Effect and Achievement   |        |   |
| (d)  | Effect, Achievement and Chemistry  | (1)    | antont analysis                                 |
| Q22. | Developing classification system for analysis is required in   | (b)    | content analysis research                       |
| (a)  | case study research  |        |   |
| (b)  | content analysis research  |        |   |
| (c)  | sample survey  | -      |   |
| (d)  | population survey  | (4)    | that change in one                              |
| Q23. | If two variables are highly correlated, what do  | (d)    | variable are                                    |
|      | you know?  |        | accompanied by                                  |
| (a)  | that they always go together   |        | predictable change in                           |
| (b)  | high value on one variable lead to high value on other variable  |        | the other                                       |
| ( c) | that there are no other variable responsible for the relationship  | 2      |   |
| (d)  | that change in one variable are accompanied by predictable change in the other   | у      |   |
| Q24. | Which of the following statements best define  | s (d)  | variables are manipulated                       |
|      | experimental research? Research in which   |        | and their effects upon other variables observed |
| (a)  | extraneous variables are removed   |        |   |
| (b)  | random samples are mandatory   |        |   |
| (c)  | rival hypotheses are tested.   |        |   |
| (d)  | variables are manipulated and their effects upon oth   | CI     |   |
|      | variables observed   |        | 1   |
| Q25. |  |        | ibid  |
|      | footnotes and endnotes means "in the same place"   | "? (6) |   |
| (a)  | et.al.   |        |   |
| (b)  | ibid   |        |   |
| (c)  | op. cit  |        |   |
| (-)  | A  |        |   |

(d) Loc.cit

1