

N.V.K.S.D. COLLEGE OF EDUCATION, ATTOOR
(AUTONOMOUS)

M.Ed. Degree Third Semester Examination, January 2021
(For the candidates admitted for the academic year 2019-2021)

Tool Course: ADVANCED RESEARCH METHODOLOGY
Course code: MED3TC03

Time: 3 Hours

Maximum Marks: 70

SECTION A (10x1 = 10 marks)

Answer ALL the questions by selecting the appropriate answers.

1. The process of determining the genuineness and authenticity of the information contained in the historical sources is
a) External criticism b) Internal criticism c) Secondary criticism d) Primary criticism
2. Research in which subjects of different ages are compared at the same time is
a) Cross sectional research b) Mixed research c) Longitudinal research d) Follow up study
3. Ethnography is the scientific description of
a) People and cultures b) People and their customs
c) People and their habits d) All the above
4. APA format is officially used to cite sources in the disciplines
a) Psychology and Education b) Psychology and Sociology
c) Psychology and Philosophy d) Psychology, Education and Social Sciences
5. Both qualitative and quantitative data is collected simultaneously in
a) Explanatory sequential mixed method b) Convergent mixed method
c) Exploratory sequential mixed method d) None of these
6. The probability of Type 1 error is referred as
a) $1-\alpha$ b) β c) α d) $1-\beta$
7. The probability of rejection of a true null hypothesis is
a) Level of confidence b) Level of significance
c) Level of acceptance d) Level of rejection
8. The non parametric test equivalent of an unpaired sample t test is
a) Sign test b) Chi square test c) Man Whitney test d) Wilcoxon matched pair test
9. The sign test assumes that
a) Samples are independent b) Samples are dependent
c) Samples have the same mean d) None of the above
10. A non parametric test is used when the data is on
a) Ratio scale b) Nominal scale c) Interval scale d) None of the above

SECTION B (5x3 = 15 marks)

Answer all the FIVE questions in about 100 words each.

11. Write about documentary analysis.
12. What are the types of mixed research?
13. What is historical criticism?
14. Write a short note on Wilcoxon matched pair test.
15. List out the uses of Man Whitney U test.

SECTION C (5x5 = 25 marks)

Answer any FIVE questions in about 200 words each.

16. Describe in detail how would you effectively utilize case study method in educational research.
17. Elaborate the sources of data and data collection procedure in ethnographic research .
18. Mention the relative advantages and limitations of cross sectional study over longitudinal study.
19. Is it necessary to formulate hypothesis in every type of research? Justify your answer.
20. Differentiate one tailed and two tailed tests
21. In an 'ANOVA' analysis, the following data were obtained for between group variance and within group variance $df=3$, $V_b=42$ and $df=36$, $V_w=72$. Calculate the value of 'F'? Explain the 'F' value.
22. Explain the use of factor analysis in educational research.

SECTION D (2x10 = 20 marks)

Answer BOTH the questions in about 500 words each.

23. a) Explain about the format of a Dissertation?

(Or)

b) Discuss the importance of historical method of research in education. Describe the major steps to be followed in conducting historical research.

24. a) The side effects of a new vaccine are being tested against the volunteers. A sample of 565 volunteers yields the results as given below. At a significance level of 0.05, is there enough evidence to conclude that the treatment is independent of the side effect of the vaccine?

Results	Drug A A	Drug B A	Total
Headache	36	13	49
Tiredness	254	262	516
Total	290	275	565

(Or)

b) Explain the different non parametric statistics and the situations in which each of them is used.