MEDC33

**N.V.K.S.D. COLLEGE OF EDUCATION, ATTOOR**

**(AUTONOMOUS)**

**M.Ed. Degree Third Semester Examination, December 2022**

**(For the candidates admitted during the academic year 2021-2022)**

**Tool course: ADVANCED RESEARCH METHODOLOGY**

**Course code:MED3TC003**

**Time: 3 Hours Maximum Marks: 70**

**SECTION A (10 x 1 = 10 marks)**

**Answer ALL the questions by selecting the appropriate answers.**

1. Type I error occurs when  
   a) We reject H0 if it is Trueb)We reject H0 if it is False  
   c) We accept H0 if it is True d) We accept H0 if it is False
2. Alternative Hypothesis is also called as  
   a) Composite hypothesis b) Research Hypothesis

**c)** Simple Hypothesis d) Null Hypothesis

1. The personalistic styles of writing a research report are permissible in

i) Grounded theory research ii) Experimental research

iii) Historical research iv) Case study research

a) i, ii and iii Only b) ii, iii and iv Only

c) i, iii and iv Only d) All of the above

1. In writing a research report, arrange the following in order and indicate your answer by selecting the correct code

i) Implications ii) Results iii) Suggestions iv) Conclusions

a) iii,ii,iv,i b) ii,iv,i,iii c) iv,i,iii,ii d) i,ii,iii,iv

1. Examples of research ethics are

i) Violating Participant confidentiality

ii) Making recommendations beyond the scope of data collected

iii) Using an inappropriate research design

iv) Changing data to meet a desire outcome

a) i, ii and iv onlyb)i, ii and iii only

c) ii,iii and iv only d) All of the above

1. Plagiarism in research is

a) Creative use of previous data

b) Copying unscrupulously and making use of it

c) Quoting someone and citing him/her

d) Referring to previous data and working over it with new objectives

1. The assumptions underlying the use of parametric statistics are

i) The variable being studied is continuous

ii) Measurements are based on nominal/ordinal scale

iii) Scores are normally distributed

iv) Variances over two groups are equal

a) ii, iii and iv b) i, iii and iv

c) i,ii and iv d) i,ii and iii

1. Compared to parametric methods, the non-parametric methods are

a) Less accurate b) Less efficient

c) Computationally easier d) both b and c

1. The Mann-Whitney U test is preferred to a *t* test when

a) Data are paired b) Sample sizes are small

c) The assumption of normality is not met

d) Samples are dependent

1. In analytical induction, if the researcher finds a deviant case

a) They ignore it and carry on

b) They must either redefine or reformulate the hypothesis

c) They conduct a parametric statistical test

d) They give up and decide to be quantitative researchers instead

**SECTION B (5 x 3 = 15 marks)**

**Answer all the FIVE questions in about 100 words each.**

1. When will you use two –tailed test?
2. What do you mean by Bibliography? State the style used for Educational research.
3. Define ‘Publication misconduct’.
4. List out the important parametric tests.
5. State the conditions for the application of Chi-square test.

**SECTION C (5 x 5 = 25 marks)**

**Answer any FIVE questions in about 200 words each.**

1. Write a note on plagiarism software with examples.
2. List out the characteristics of a good dissertation.
3. Describe the scientific mis-conducts.
4. How will you practise research integrity?
5. Define Appendix. Bring out the guidelines for writing appendix.
6. Mention the uses of ANCOVA.
7. Explain the procedure of sign test with an example.

**SECTION D (2 x 10 = 20 marks)**

**Answer BOTH the questions in about 500 words each.**

1. a) Explain the procedure of hypothesis testing.

(or)

b) Elucidate the format of a research report.

1. a) Thirty boys and forty girls selected randomly from the eighth class of a school were given a standard test of arithmetic ability. Their means and SD’s are reported below:

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N M SD

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Boys 30 20.5 4.0

Girls 40 16.2 5.0

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Is the mean difference in the arithmetic ability significant?

(or)

b) Find the value of Chi-square for the following information

Class A B C D E

Observed frequency 8 29 44 15 4

Theoretical frequency 7 24 38 24 7