

QP CODE: 20001211



Reg No :

Name :

M.Ed. DEGREE(CSS) EXAMINATION, FEBRUARY 2021

Second Semester

M.Ed

**CORE COURSE - ED010204 - ADVANCED EDUCATIONAL RESEARCH AND
STATISTICS**

2019 Admission Onwards

FA422264

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

Answer any **eight** questions.

Weight 1 each.

1. Define Factorial design.
2. Define Sampling.
3. Explain Simple random sampling.
4. Point out the errors in Sampling.
5. Evaluate the advantages of projective technique used for data collection?
6. What do you meant by T score?
7. Write names any three parametric test.
8. What is Non- parametric test?
9. What do you mean by cyber ethics?
10. What do you mean by bibliography?

(8×1=8 weightage)

Part B (Short Essay/Problems)

Answer any **six** questions.

Weight 2 each.

11. Define single variable design and give situations in educational research where this design can be applied.
12. What are the advantages and limitations of cumulative record?
13. Point out the characteristics of a good measuring tool?
14. What are the characteristics of NPC?



15. Explain common errors in Research process.
16. Why do we use null hypothesis in research?
17. Write a note on qualitative and quantitative analysis of data in educational research.
18. Discuss the nature of a well prepared review of related literature given in a research report.

(6×2=12 weightage)

Part C (Essay Type Questions)

Answer any **two** questions.

Weight 5 each.

19. Mention different types of Historical research and clarify its relevance in Educational research.
20. Describe the construction and standardisation of test?
21. Given distribution of a score with a mean of 12 and standard deviation 4 . Assuming normality,
1) What percentage of cases fall between 8 and 16 2) What percentage of cases lie above the score 18
3) what percentage of scores lie below the score 6
22. What is the significance of hypothesis testing in educational research? Explain the different types of errors in decision making. How they affect generalization of findings?

(2×5=10 weightage)



M.Ed. DEGREE EXAMINATION, MAY 2019

Second Semester

EDU 909—ADVANCED EDUCATIONAL RESEARCH AND STATISTICS

(2015 Admission onwards)

[Regular/Supplementary]

Time : Three Hours

Maximum : 80 Marks

Part A

*Answer any two questions.
Each question carries 10 marks.*

1. Explain the ethical issues in educational research. What are the measures taken for checking plagiarism in educational research ?
2. In a study of reading achievement, a sample of 162 boys and a sample of 158 girls of Standard X, scored as below on a reading achievement test ?

Sex	N	Mean	SD
Boys ...	162	115	14.52
Girls ...	158	119	9.81

Assuming that our samples are random, is the difference between the means significant at 0.05 level. Discuss.

3. The mean of an achievement test is 80 and standard deviation is 10. The test was administered to 1000 students :
 - (a) Find the limits for middle 60 % of the students.
 - (b) Find the percentage of the cases falling between 75 and 87.5.
4. Discuss the uses and limitaitons of various measures of central tendency and variability with the help of illustrations.

(2 × 10 = 20 marks)

Part B

*Answer any ten questions.
Each question carries 5 marks.*

5. Calculate Q.D. and S.D. for the following distribution :—

48—51	5
44—47	12
40—43	58
36—39	40
32—35	22
28—31	12
24—27	1

Turn over

6. Describe 'Survey Research' in educational research.
7. What are the criteria for evaluating a research report ?
8. Define Factorial design in educational research. What are the assumptions and uses of this design ?
9. What do you mean by computer analysis of data ? Which are the different software available for data analysis ?
10. What are the internal and external criticisms of sources in historical research ?
11. Explain the meaning Nominal, Ordinal, Interval and Ratio type of measurement with the help of an illustration.
12. Explain the uses of Normal Probability Curve in educational research. Describe the role of type I and type II errors in testing of hypothesis.
13. Explain the differences between parametric and non-parametric tests of significance.
14. Discuss the differences between Excel and SPSS software.
15. Explain the use of computer software in qualitative data analysis.
16. What is sampling ?

(10 × 5 = 50 marks)

Part C

*Answer any five questions.
Each question carries 2 marks.*

17. Write an example for a cross-sectional design in research.
18. What is standard error of mean ?
19. What is meant by pagination in research reporting ?
20. Explain stratified sampling with an example.
21. Define skewness.
22. What is the purpose of Statistics in research ?
23. What are E-tools ?

(5 × 2 = 10 marks)

M.Ed. DEGREE EXAMINATION, JUNE 2017**Second Semester**

Common Core Course

EDU 909—ADVANCED EDUCATIONAL RESEARCH AND STATISTICS

(Regular/Supplementary—2015 Admission onwards)

Time : Three Hours

Maximum : 80 Marks

Part A*Answer any two questions.**Each question carries 10 marks.*

1. Explain the various tools and techniques that are used in educational research. Mention any two advantages and disadvantages of each tool.
2. What do you mean by research designs ? What are the principles of experimental designs ? Explain the different experimental designs.
3. Explain the concepts Type I and Type II error in hypothesis testing. What do you mean by level of significance of a test ? Distinguish between directional and non-directional hypothesis testing.
4. When will you use Chi square test of independence ? Test the hypothesis that method of therapy is independent of rating assigned, for the following data :

		Rating	
		Improvement	No improvement
Therapy I	...	16	28
Therapy II	...	9	37

(2 × 10 = 20 marks)

Part B*Answer any ten questions.**Each question carries 5 marks.*

5. Briefly explain probability and non-probability sampling techniques.
6. Describe the criteria to be followed while selecting a research problem.
7. Calculate 95 percent and 99 percent confidence interval for the mean, if mean (M) = 50 and standard deviation (SD) = 10, for sample size (N) = 180.
8. What are the principles of conducting interview as a research technique ?
9. Distinguish between Fundamental, applied and action researches.
10. What are the basic properties of a normal probability curve ?

Turn over

11. Explain measures of central tendency and measures of variability.
12. How will you ensure item quality in a test ?
13. Illustrate the concept of degrees of freedom (d.f.).
14. Explain the different kinds of rating errors.
15. Differentiate between longitudinal and cross-sectional studies with suitable examples.
16. Explain how you will assess the authenticity of data in historical researches.

(10 × 5 = 50 marks)

Part C

Answer any five questions.

Each question carries 2 marks.

17. State and four conditions stipulated by APA in preparing tables for presenting data.
18. What do you mean by bibliography ?
19. What is the procedure behind use of ANOVA in testing hypothesis ?
20. Explain the term plagiarism in research reports.
21. What do you mean by standard scores ?
22. Show your familiarity with any two softwares used for analysis of data in social science researches.
23. List any two ethical issues in educational research.

(5 × 2 = 10 marks)

M.Ed. DEGREE EXAMINATION, MAY 2016**Second Semester****Common Core Course****EDU 909—ADVANCED EDUCATIONAL RESEARCH AND STATISTICS****(Regular—2 Year—2015 Admissions)**

Time : Three Hours

Maximum : 80 Marks

Part A*Answer any two questions.**Each question carries 10 marks.*

1. Explain the criteria to be borne in mind while evaluating a research report, on the basis of APA style and format.
2. What do you mean by hypothesis testing for statistical inferences ? Explain the concepts Type I and Type II error in hypothesis testing. Also explain level of significance of a test.
3. What are the basic properties of a normal probability curve ? Consider a distribution of scores on an examination with a mean (M) = 80 and Standard Deviation (S.D.) = 14. Find out the percentage of cases between 60 and 100. What percentage of cases lie above the score 90 ?
4. Explain how you will conduct review of related literature. Why is it an essential part of a research study ? Show your familiarity with a few sites and search engines used in educational researches.

(2 × 10 = 20 marks)**Part B***Answer any ten questions.**Each question carries 5 marks.*

5. What are the characteristics of research ?
6. Differentiate between Qualitative and Quantitative researches.
7. Define the concepts of population, sample, parameter, statistics, and sampling error.
8. Differentiate between One-tailed and Two-tailed tests.
9. What are the formal criteria for preparing tables and graphs for presentation of data in research reports ?
10. Explain the assumptions behind using parametric and non-parametric tests for statistical inferencing.
11. Explain the probability sampling techniques. What is the rationale for fixing sample size ?
12. Explain the qualities of a good research tool.

Turn over

13. Explain the steps in conducting historical research.
14. Explain the various experimental designs indicating their advantages and limitations.
15. How will you develop a rating scale ? Give a brief mention about different types of rating errors.
16. Explain the terms nominal, ordinal, interval and ratio scales of measurement of variables.

(10 × 5 = 50 marks)

Part C

*Answer any five questions.
Each question carries 2 marks.*

17. Explain the term plagiarism.
18. Differentiate between reference and bibliography.
19. State any *two* assumptions underlying the use of ANOVA.
20. What are the main features of a case study ?
21. What are the limitations of observation as a research technique ?
22. State any *two* differences between tests and inventories.
23. What is meant by T-scores ?

(5 × 2 = 10 marks)