S.4

TM242209Y

Reg. No :.....

Name :.....

MASTER'S DEGREE (C.S.S) EXAMINATION, MARCH 2024

2023 ADMISSIONS REGULAR

SEMESTER II - CORE COURSE CHILD DEVELOPMENT

CD2C07TM20 - Research Methods and Statistics II

Time : 3 Hours

Maximum Weight : 30

Part A

I. Answer any Eight questions. Each question carries 1 weight (8x1=8)

1. What is convenience sampling?
2. State the important factors to be considered in determining sample size.
3. What is meant by classification according to attributes?
4. What are essential to a good statistical table?
5. Define concepts used in study.
6. Define patent.
7. Distinguish between discrete random variable and continuous random variable with example.
8. A letter is chosen from the word HOME SCIENCE. What is the probability of obtaining
   (i) the letter E (ii) the letter C
9. Distinguish between a Parameter and a Statistic.
10. What is a Statistical hypothesis?

Part B

II. Answer any Six questions. Each question carries 2 weight (6x2=12)

11. Differentiate between quota sampling and stratified random sampling.
12. What are the rules observed in constructing a table?
13. List the points to be considered while framing the title of a study.
14. Suggest some points to improve the quality of research and publication.
15. Mean IQ of a group of 800 children is 98. The standard deviation is 8. Assuming normality, find the number of children having IQ between 100 and 120.
16. Two unbiased dice are tossed. Find the probability of getting
    (i) a sum of 8 (ii) a product of 12 (iii) the number 5 on one die only
17. Distinguish between standard error and standard deviation.
18. Explain the different steps of a testing of hypotheses procedure.

Part C

III. Answer any Two questions. Each question carries 5 weight (2x5=10)

19. Explain different types of classification of data.
20. Discuss the guidelines for writing a good research paper.
21. In a Normal distribution, 15% of the items are below 35 and 10% of the items are above 65. Find the mean and standard deviation of the distribution.
22. Given the following contingency table, test whether there is any association between father's eye colour and son's eye colour

Son's eye colour →	Light	Dark

Father's eye colour ↓		
Light	230	148
Dark	151	471