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MASTER'S DEGREE (C.S.S) EXAMINATION, MARCH 2024 2023 ADMISSIONS REGULAR

SEMESTER II - CORE COURSE RMID

RM2C07TM20 - 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

