(6 pages)

Reg. No. : ....

Code No. : 8058   Sub. Code : KCAM 51/
                            PCAM 54

M.C.A. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2019.

Fifth Semester

Computer Application

RESEARCH METHODOLOGY

(For those who joined in July 2016 and afterwards)

Time : Three hours   Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Simple Random sampling is also known as
    _____
    (a) chance sampling
    (b) probability sampling
    (c) both (a) and (b)
    (d) none

2. A concept which can take on different quantitative values is called _____
    (a) constant   (b) variable
    (c) both (a) and (b)   (d) none

3. In some instances, the most practical way of sampling is to select every i^{th} item on a list. This type of sampling is known as _____ sampling
    (a) area   (b) stratified
    (c) cluster   (d) systematic

4. _____ is simply a system of assigning number symbols to events in order to label them.
    (a) nominal scale   (b) ordinal scale
    (c) interval scale   (d) ratio scale

5. Expand ANOVA _____
    (a) Algorithmic of Variance
    (b) Analysis of Variance
    (c) Analysis of Variable
    (d) None of the above

6. Chi-square symbolically written as _____
    (a) χ^2 (b) y^2
    (c) z^2 (d) none

7. _____ test consists of ten cards having prints in ink blots

   (a) Holtzman Ink blot

   (b) Rosenzweig

   (c) Rorschach

   (d) None

8. A brief review of the main findings just in two or three pages is called _____

   (a) method of employed

   (b) summary of results

   (c) nature of the study

   (d) none

9. Step by step procedure to solve the problem is called _____

   (a) algorithm   (b) flow chart

   (c) both (a) and (b)   (d) none

10. The _____ phase consists of formulation of research problem, review of literature theoretical frame work and formulation of hypothesis

   (a) Empirical

   (b) Design and Planning

   (c) Analytic

   (d) Conceptual

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) List out the qualities for the "Good Research".

   Or

   (b) What is the meaning of Research Design?

12. (a) Differentiate: Non-probability sampling Vs Probability sampling.

   Or

   (b) What is the meaning of measurement in research? Explain Nominal scale and ordinal scale in detail.

13. (a) What is Chi-square test? Explain its significance in statistical analysis.

   Or

   (b) What is Latin square design?

14. (a) What are the difference between Questionnaires and schedules in collection of data?

   Or

   (b) What are the precautions should be taken while writing a research reports?

15. (a) Write any one of the solution procedure algorithm.

Or

(b) List out and explain the characteristics of a computer system.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) What is the meaning of research? Describe the different types of research in detail.

Or

(b) Define the term research problem. What are the techniques involved in defining a problem?

17. (a) Write short note on the following:
    (i) Systematic sampling
    (ii) Stratified sampling
    (iii) Cluster sampling
    (iv) Multistage sampling.

Or

(b) (i) List out and explain the possible sources of error in measurement.

    (ii) Give a brief note on tests of sound measurement.

18. (a) Give a brief note on "yate's correction and its applications".

Or

(b) What are the steps involved in one way ANOVA technique? Explain each one of them.

19. (a) What are the methods involved in collection of primary data?

Or

(b) Explain about the Mechanics of writing a research report with model.

20. (a) How did computers play a important role in research?

Or

(b) Give a brief note on the different types of Algorithmic Research Problems.

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