

(6 pages)

Reg. No.:.....

Code No. : 6063

**Sub. Code : KCAM 51/
PCAM 54**

M.C.A. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2020.

Fifth Semester

Computer Application

RESEARCH METHODOLOGY

(For those who joined in July 2016 and afterwards)

Time : Three hours

Maximum : 75 marks

PART A — ($10 \times 1 = 10$ marks)

Answer ALL questions.

Choose the correct answer

1. _____ is a way to systematically solve the research problem.
 - (a) Research methodology
 - (b) Research process
 - (c) Empirical research
 - (d) None

2. Simple random sampling is also known as _____.
- (a) chance sampling
 - (b) probability sampling
 - (c) both(a) and (b)
 - (d) None
3. A concept which can take on different quantitative value is called _____.
- (a) constant (b) variable
 - (c) both (a) and (b) (d) none
4. Arbitrary scales are developed on _____ basis.
- (a) unambiguous (b) scalogram
 - (c) adhoc (d) unidimensional
5. ANOVA stands for _____.
- (a) Analysis of value
 - (b) Analysis of variance
 - (c) Accept of variance
 - (d) none
6. Chi-square is an important _____ test.
- (a) Parametric (b) Non-parametric
 - (c) Dependence (d) None

7. The _____ is concerned with broad underlying feelings or motivations or with the course of individual life experience.
- (a) focussed interview
 - (b) personal interview
 - (c) clinical interview
 - (d) telephone interview
8. Data that are collected afresh and for the first time is called _____.
- (a) Secondary (b) Primary
 - (c) Used (d) Unused
9. Second generation computer consist of devices _____.
- (a) Valve
 - (b) Transistor
 - (c) IC
 - (d) Capacitors
10. The fourth-generation computer developed in _____
- (a) 1947 (b) 1954
 - (c) 1959 (d) 1972

PART B — ($5 \times 5 = 25$ marks)

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

Each answer should not exceed 250 words.

11. (a) Explain data collection in research process.
Or
(b) Explain about the types of research.
12. (a) Discuss the implication of sample design.
Or
(b) Explain any three-scale construction technique.
13. (a) Write the limitations of Chi-Square test.
Or
(b) What is ANOVA in Latin-Square design?
14. (a) Write about questionnaires in data collection.
Or
(b) Write the different steps in report writing. Give example.
15. (a) What is meta heuristics for combinational problem?
Or
(b) Write any two types of algorithmic research problem.

PART C — ($5 \times 8 = 40$ marks)

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

Each answer should not exceed 600 words.

16. (a) What are the techniques involved in defining a research problem? Give any one example of research problem.

Or

- (b) Explain

- (i) Features of good design
- (ii) Need for research design.

17. (a) Write about measurement scales and its types.

Or

- (b) Discuss test and sound measurements.

18. (a) Explain about one way ANOVA?

Or

- (b) Enumerate about Yate's correction.

19. (a) Discuss the interview method of data collection with its types.

Or

- (b) Difference between questionnaires and schedules in data collection.

20. (a) Explain the role of computers in research and its applications.

Or

- (b) Explain about the meta heuristics for combinational problem.
-