

QP CODE: 24800359



Reg No :

Name :

I.M.C.A DEGREE EXAMINATION, DECEMBER 2023

Sixth Semester

Faculty of Technology & Applied Science

Integrated MCA

CORE - IMCA6C01 - RESEARCH METHODOLOGY

2020 Admission Onwards

43CD92F0

Time: 3 Hours

Maximum: 75 Marks

Part A

*Answer any **ten** questions*

*Each question carries **3** marks*

1. Explain definition of research .
2. Explain primary and secondary data .
3. List the factors for selecting a research problem .
4. Differentiate between median and mode of a data .
5. Calculate the geometric mean of 4,6,9 .
6. What is mean deviation ?
7. Explain any two error measures .
8. Explain the term level of significance .
9. Write any three keyelements that distinguish a well-crafted abstract from a conclusion of a research paper.
10. How does the h-index differ from other citation-based metrics?
11. List any three differences between registered trademark and common law.
12. Explain the purpose of LaTeX environments.

(10×3=30 marks)





Part B

Answer *all* questions

Each question carries **9** marks

13. a) What is research? Explain the objectives of research.

OR

b) Explain the steps in formulation of a research problem.

14. a) Explain any 3 measures of central tendency with example.

OR

b) What is range of a data distribution? Explain with example.

15. a) Explain different types of errors.

OR

b) Test whether the accidents occur uniformly over week days on the basis of the following data day-number of accident. Sunday-11, Monday-13, Tuesday-14, Wednesday-13, Thursday-15, Friday-14, Saturday-18 (use chi-square test, level of significance 5%)

16. a) Enumerate and discuss alternative measurements of impact beyond impact factor, elucidating their relevance and advantages in assessing research impact.

OR

b) Explain the significance of the conclusion section in a research manuscript, outlining its components and the importance of drawing accurate conclusions from the study.

17. a) Define copyrights and discuss the scope of protection they offer. Evaluate the challenges posed by digital piracy and unauthorized sharing of copyrighted content in the digital age.

OR

b) Discuss the critical components of a research report's mechanics, encompassing formatting styles, citation methods, and referencing guidelines.

(5×9=45 marks)

