

ST JOSEPH'S UNIVERSITY, BENGALURU -27

MCA Entrance Test- 2025

Question Paper Pattern:

Time: 1 Hour

Max Marks: 60

PART A

Answer all the 35 Multiple Choice Questions

35*1= 35

1.Question No.1

A) Option A

B) Option B

C) Option C

D) Option D

PART B

Answer all the 5 Programming questions

5*5= 25

- 1.
- 2.
- 3.
- 4.
- 5.

Syllabus for MCA Entrance Test- 2025

Programming Skills (C Language)

Basics of C Programming, Data Types, Variables, and Constants Operators and Expressions- Control Structures (if, switch, loops) Functions -Function prototypes, definitions, and calling, Passing parameters (by value and by reference), Recursion, Data Structures, Pointers and Dynamic Memory Allocation, Structures and Unions.

Preparation Resources:

- Link to video lectures on C programming fundamentals
- <http://www.staloysius.ac.in/sju-courses.html>
- <https://youtu.be/LfaMVIDaQ24?feature=shared>
- <https://youtu.be/PaPN51Mm5qQ?feature=shared>
- https://youtu.be/J63saAna_OA?feature=shared

Candidates are expected to write 4-5 functions/subprograms using C during the test.

Logical Reasoning and Analytical Ability

- Logical Puzzles and Riddles, Problem-Solving Techniques, Data Interpretation, Series Completion and Analogies, Syllogism, Blood Relations, Directions, and Seating Arrangements. **Mathematics:** Algebra, Set Theory, Probability and Statistics (Mean, Median, Mode, Basic Probability), Geometry (Basic concepts, Area, and Perimeter)

Computer Fundamentals

- Components of a Computer, Concepts of Data Storage Software and Types of Software, Computer Networks (LAN, WAN, MAN), **Data Representation-** Binary Number System, Conversion between Number Systems (Decimal, Binary, Hexadecimal). Cyber Security Basics -Common Threat and Security Practices