ST JOSEPH'S UNIVERSITY, BENGALURU -27

Syllabus for MCA Entrance Test- 2027

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/LfaMVlDaQ24?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

Date & session:

ST JOSEPH'S UNIVERSITY, BENGALURU -27
MCA - Master of Computer Applications
ENTRANCE EXAMINATION: 2027

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.