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MCA Entrance Syllabus from Session 2020 and onwards
Dr. Harisingh Gour Vishwavidyalaya Sagar (M.P)
(A Central University)

UNIT I:

Mathematics: Set Theory, Functions, Relation, Limit and Continuity, Differential and Integral Calculus, Matrix Algebra: types of matrix, Inverse of matrix, symmetric and skew-symmetric.

Reasoning: Number series, Letter and symbol series, mathematical operations, Blood relations, Direction sense test, Coding-decoding.

[40 Questions]

UNIT II:

Computer Fundamentals: Computer Basic, Number System, Binary Arithmetic, I/O Units, Computer Memory, Processor, Logic Gates, Computer Languages, Computer Generations and Classifications, Basic DOS: Internal and External Commands.

[25 Questions]

UNIT III:

Computer Network, Network Topologies, Operating system, types of operating system: time sharing, multiprogramming, real time etc.

[15 Questions]

UNIT IV:

Introduction of DBMS, relation, relationship, attributes, primary key, foreign key, secondary key, Tuples, Normal form: 1NF, 2NF and 3NF. Software Engineering: SDLC, Water fall Model, Spiral Model, Incremental Model.

[10 Questions]

UNIT V:

Programming in 'C' : Constants, Variables and Data types, Operators and Expressions, I/O Operators, Decision making, Branching, Looping, Arrays

[10 Questions]

D. Shukla
28/11/2020
Chairman (BOS)

Chairman, BOS
Computer Science & Applications