

कम्प्यूटर विज्ञान एवं सूचना प्रौद्योगिकी अध्ययनशाला

पं रविशंकर शुक्ल विश्वविद्यालय, रायपुर (छ.ग.)

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रायपुर, दिनांक \5/07/2019

प्रति.

विशेष कर्तव्यस्थ अधिकारी (अका.) पं. रविशंकर शुक्ल विश्वविद्यालय. रायपुर (छ.ग.)

विषय— स्नाकोत्तर स्तर प्रवेश परीक्षा के पाठ्यक्रम बाबत्। संदर्भ- क्रमांक 671/अका./2019 रायपुर, दिनांक 12/07/2019

महोदय,

संदर्भित पत्र के परिपेक्ष्य में कम्प्यूटर विज्ञान अध्ययनशाला द्वारा प्रवेश परीक्षा 2019-20 के पाठ्यक्रम का निर्माण कर भेजा जा रहा है। (संलग्न-01 सूची)

सूचनार्थ।

कम्प्यूट्य विज्ञान अध्ययनशाला पं । विश्रांकारमञ्जूषात्क । विश्व विद्यास्त्राच्यां ।

Mr Vional

CS&IT//COVERING LETTER//

Syllabus of Entrance Exam for M.Sc. (IT)

Eligibility - BCA or Graduation with Mathematics as a subject

Data Representation

Data types, number systems, fixed point representation, 1's and 2's complements, Binary fixed point representation, arithmetic operation on binary operation, overflow and underflow, codes, ASCII, EBCDIC codes, Grey codes, Excess-3, BCD codes, Error detection and correcting codes. Logic gates AND, OR, NOT, gates and their truth tables, MOR, NAND and XOR gates, Boolean algebra, basic Boolean Law, demorgan's theorem, Map Simplification, Minimizing technique, K-Map, Sum of product, Product of sum. Combinational and sequential circuits, binary adder, substractor, Flip flop, shift register, encoder, decoder, comparator, Multiplexer, Demultiplexer.

Computer Fundamentals

Computers - Introduction, Development of Computers, Types of Computers, Generations of Computers; Input Device; Output Devices; Central Processing Unit; Storage Devices; Computer Softwares. Operating System - Introduction, Uses of OS, Functions of OS, Booting process, Types of Reboot, Booting from different OS, Types of OS, DOS, Windows, Linux.

Programming language C & C++

Overview of C, Data Types, Constants and Variables, Operators and Expressions, Control Structures and Loops, functions, Storage class, Arrays & Pointes, Structures and Unions. Introduction to OOPS, Data Structure - Stack, queues, link lists, tree, sorting and searching.

Communication, Networks and Internet

Communication - Introduction, Communication process, Communication Types, Communication Protocols, Communication Channels/Media. Introduction to Network and Types; Topology. Brief overview of the OSI and TCP/IP model, switching, IP Addressing. Internet -Introduction, Internet Service Provider, ARPANET and Internet, Services Available on Internet - File Transfer Protocol, HTTP, E-mail, WWW, Website, Webpage, Applications of Internet.

Office Automation

Word: Creating and Formatting, Advanced Features, Mail Merge, Table & Charts. Excel: Worksheet Basics, Working with Formula & Cell referencing, Graphs & Charts, Function and Macros. Power Point: Creating a presentation, Modifying visual Elements, Adding objects, Applying Transitions, animations and linking, Preparing handouts, presenting a slide show.

Data Base Management System

Purpose of database systems, views of data, Database Languages, Database Administrator and User, Database System Structure, Data Models, concept of Keys, Relational Algebra, Normalization, SQL.