Koneru Lakshmaiah Education Foundation
(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)
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Campus: Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA.
Phone No. +91 8645 - 350 200; www.klef.ac.in; www.klef.edu.in; www.kluniversity.in
Admin Off: 29-36-38, Museum Road, Governorpet, Vijayawada - 520 002. Ph: +91 - 866 - 3500122, 2576129

Department of Computer Science and Applications

Program: BCA

Academic Year 2018 -19

Course Code	Course Title	Co.No.	Description of the Course Outcomes
18UC1101	Basic English	CO1	Apply the practical knowledge of using action words in sentence construction.
		CO2	Apply and analyse the right kind of pronunciation with regards to speech sounds and able to get different types of pronunciations.
		CO3	Apply the concept of fundamental principle of counting to solve the problems on linear, circular permutations and also for the problems on selections. Apply the concept of probability, while doing the problems on Leap year & Non-Leap year problems, coins, dice, balls and cards.
		CO4	Analyze the given conditions and finding out all the possible arrangements in linear & circular order. Analyze the given numbers or letters to find out the hidden analogy and apply that analogy to find solutions. Finding the odd man out by observing the principle which makes the others similar.
18MT1105	Fundamentals of Mathematics	CO1	Solve problems of matrices, limits and differential equations
		CO2	Formulate differential calculus, differentiation rules and identify a method for solving and interpreting the results.
		CO3	Formulate physical laws and relations mathematically
		CO4	Verify the solution of problems through MATLAB.
18SC1105	Logic And Reasoning	CO1	Apply the fundamental principle of counting and use them to measure the uncertainty in random experiments.
		CO2	Apply Venn diagrams to find the conclusion of statements , solve puzzles using binary logic and problems relating to cubes.
		CO3	Apply the available models for Data sufficiency & redundancy and interpret it , when given, in tabular and graphical forms.
		CO4	Apply the Reasoning techniques to solve problems on arrangements, series, analogies, coding and decoding.
18GN1001	Ecology and	CO1	Identify the importance of Environmental education and

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	Environment		conservation of natural resources.
		CO2	Describe the importance of ecosystems and biodiversity.
		CO3	Apply the environmental science knowledge on solid waste management, disaster management and EIA process.
18CA1101	Fundamentals of information technology	CO1	Understand the basic concepts and terminology of information technology
		CO2	Understand Data representation and need of Logic Gates
		CO3	Understand different Types of Memories and operating systems
		CO4	Apply the functionalities available in MS Office, Latex ; Installing of Windows and Linux operating systems
18CA1102	Programming in C	CO1	Explain different concepts of C programming, used to create programs.
		CO2	Discuss about different data types and control structures
		CO3	Demonstrate the working of functions, arrays and pointers
		CO4	Identify the working of different file handling methods
		CO5	Create programs using basic and advanced concepts of C language
18CA1103	Computer Organization	CO1	Understand the basic units of digital computer system and number system
		CO2	Understanding the basic operations of the micro operations
		CO3	Analyze the machine instructions and codes to implements
		CO4	Understanding various components of CPU and memory system.
18UC1202	English Proficiency	CO1	Apply the concepts of accurate English while writing and become equally at ease in using good vocabulary and language skills.
		CO2	Understand the importance of pronunciation and apply the same day to day conversation.
		CO3	Apply the concepts of Ratios, Percentages, Averages and Analysing the given information, a student is required to understand the given information and thereafter answer the given questions on the basis of comparative analysis of the data in the form of tabulation, bar graphs, pie charts, line graphs. Analyse the given data to find whether it is sufficient or not.

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		CO4	Apply the basic functionality of Clocks and Calendars to find the solutions for the problems. Analyze the given symbols to understand the hidden meaning of the given expression and finding the solutions. Analyze the given conditions and finding out all the possible arrangements in linear & circular order.
18MT1208	Computer-Oriented Statistical Methods	CO1	To understand the basic concepts of statistics and explains the various methods of descriptive data collection and analysis
		CO2	Construct the probability distribution of a random variable, based on real-world situation, and use it to compute expectation and variance
		CO3	Predict the relationship between two variables and construct the linear and non-linear regression lines for the given data
		CO4	Predict the trend variations for times series data and also identify the Statistical data using Ms-Excel
		CO5	Verify the solution of problems through MINITAB
18MB4055	Organization Management	CO1	Understand the theories and approaches of organizational management
		CO2	Understand the basics of organization structure
		CO3	Understand the methods for motivating in competitive business environment.
		CO4	Understand the basic modes of maintaining good industrial relations
18CA2110	Computer Networks	CO1	Discuss how to establish a connection among various devices. Explain the different networking concepts and devices that are used today for establishing connectivity.
		CO2	Summarize the functionalities of different network protocols
		CO3	Describe different WAN technologies, topologies and other basic networking concepts.
		CO4	Explain how to troubleshoot a network.
18CA1205	OOPS through Java	CO1	Discuss different object oriented concepts, features and its application through java.
		CO2	Apply the java concepts to create standalone desktop applications.
		CO3	Identify the different predefined classes and methods in

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			packages
		CO4	Apply java concepts to create UI oriented applications, along with database manipulation.
		CO5	Create applications using java concepts, swings and JDBC
18CA1207	Data Structures Using C	CO1	Discuss various data structures and explain how they can be used for searching and sorting elements
		CO2	Identify the pros and cons of different searching and sorting algorithms
		CO3	Discuss the working of different data structures and their applications
		CO4	Summarize the working of linked lists, trees and graphs
		CO5	Create programs to demonstrate the functionality of different data structures, sorting algorithms, searching algorithms, etc.
18UC3206	Campus to Corporate	CO1	Analyze basic concepts of critical and analytical reasoning skills apply strategies to analyze issues, arguments and some aspects of corporate communication.
		CO2	Creativity in writing of any given context like sending Emails, Reports, Proposals etc. Make the student to face HR interviews.
		CO3	Apply the concepts of Arithmetic, the students enhance their problem solving skills which helps them to succeed in campus drives, grooming the young learners into the corporate world.
		CO4	Analyze the basic concepts of Critical and Analytical Reasoning in meeting the challenges of the professional world.
18UC0010	Universal Human Values and Professional Ethics	CO1	Understand and identify the basic aspiration of human beings
		CO2	Envisage the roadmap to fulfill the basic aspiration of human beings.
		CO3	Analyze the profession and his role in this existence.
18CA2107	Principles Of Virtualization & Cloud Technology	CO1	Describe cloud concepts and types of cloud
		CO2	Migration and governance in cloud
		CO3	Enumerate basic concepts of Virtualization
		CO4	Illustrate deployment of VMWare
18CA2108	Operating System	CO1	Discuss the working of an operating system, with its features, uses, and other functionalities.
		CO2	Describe process and storage management and how OS

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			performs various functionalities
		CO3	Identify the purpose of different process synchronization and management methods
		CO4	Describe security and file system management in an operating system.
18CA2109	Database Management Systems	CO1	Discuss the importance of creating and maintaining an error free database.
		CO2	Apply different SQL commands to manipulate a database
		CO3	Discuss how to normalize a database
		CO4	Describe transaction concepts in a database
		CO5	Create database tables and manipulate them using SQL queries
18CA2110	Web Technologies	CO1	Describe the features of different web technologies
		CO2	Illustrate applications using HTML, CSS and JS
		CO3	Identify the different tools used for creating web pages and what are their pros and cons
		CO4	Apply multimedia, canvas and storage concepts to develop HTML5 apps
		CO5	Create web pages, forms, etc. Use styling techniques in the web pages and validate them.
18UC2204	Aptitude Builder – 1	CO1	Apply the concept of Critical Reading and Analytical Reading and comprehend the key ideas and gist of a passage.
		CO2	Apply the concepts of grammar, various strategies and the usage of formal language in written expression
		CO3	Apply the concepts of Numbers to solve the problems related to divisibility rules, problems based on Unit's digit, Remainders, Successive Division, Prime Factorization, LCM & HCF problems.
		CO4	Apply the various concepts of cubes to find out how to cut a cube to get the maximum number of smaller identical pieces, how to minimize the number of cuts required to cut a cube into the given number of smaller identical pieces, how to count the number of smaller cubes which satisfy the given painting scheme.
18CA2211	Software Engineering	CO1	Discuss the need for following a well-structured format for the development of software applications
		CO2	Generalize how to reduce the complexity to transition from one phase in software development to another.

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		CO3	Summarize different testing concepts
		CO4	Identify how to manage a software development project
18CA2212	Fundamentals Of Information Security	CO1	Explain various information security concepts
		CO2	Discuss the need for information security in the internet, and how to manage the risks.
		CO3	Summarize how to identify and access risks
		CO4	Describe network infrastructure security and how to monitor a network
18CA2213	Ethical Hacking Fundamentals	CO1	Explain the concepts and types of Ethical Hacking
		CO2	Using tools create hack in scenarios
		CO3	Identify how to perform web hacking
		CO4	Implement report writing and mitigation
		CO5	Demonstrate the concepts of ethical hacking using tools and techniques
18CA2214	Cryptography Fundamentals	CO1	Explain concepts of cryptography/ algorithms/ keys
		CO2	Identify the use of digital signatures
		CO3	Explain concepts involved in key management
		CO4	Discuss various applications of cryptography
18CA2215	Fundamentals Of Datacenter	CO1	Explain the basic concepts of data center and its components
		CO2	Describe data center designs
		CO3	Compare different types of server farms
		CO4	Discuss data center construct and back-up/recovery technologies
18CA2216	Fundamentals Of Cloud Storage	CO1	Explain the types of storage and usage in different scenarios
		CO2	Outline concepts of a backup recovery and management of data
		CO3	Explain consistency and management of storage infrastructure
		CO4	Identify different storage management challenges
18UC3105	Aptitude Builder – 2	CO1	Apply the strategies and techniques learnt in carrying out conversations in different contexts. Analyse the different parameters and formats of written technical communication and apply in everyday work and life.
		CO2	Analyse the concepts of critical and analytical reading skills. Apply the strategies and techniques learnt in

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			handling interviews in different contexts.
		CO3	Apply the concepts of Ratio & Proportion, Percentages, Profit &Loss, Simple & Compound Interest, students will be able to solve the problems based on Ratios, problems involving Percentages, problems related to cost price, selling price, profit, loss, marked price and discounts, problems involving interest.
		CO4	Analyze the given series of numbers to predict the next number in the series. Analyze the given set of numbers or letters to find the analogy. Analyse the given data to find the code which is used to encode a given word and use the same code in the process of decoding. Apply the given set of conditions to select a team from a group of members.
18CA3117	Computer Forensics	CO1	Explain Forensics in Information Technology World
		CO2	Discuss different data recovering methods
		CO3	Identify various forensics techniques and their working
		CO4	Explain the use of cyber laws and describe them
		CO5	Analyze and validate forensic data
18CA3118	Virtualization & Cloud Security	CO1	Explain importance of Information Security in the Cloud Context
		CO2	Discuss various concepts of cloud security
		CO3	Classify the cloud vulnerabilities and threats
		CO4	Outline how cloud and Security works in a seamless model
18CA3119	IT Governance, Risk& Information Security Management	CO1	Define Governance in Info Sec areas
		CO2	Classify various threats and risk involved
		CO3	Summarize the Risk IT Framework
		CO4	Identify how to manage information security
18CA3120	Server Operating Systems	CO1	Ability to understand the components of Windows Server 2008 and their functions
		CO2	Ability to configure and manage network servicesand active directory domain services
		CO3	Ability to understand the components of Linux OS and their functions
		CO4	Ability to manage advanced users and groups
		CO5	Ability to handle server process management and trouble shooting
18FL3054	French Language	CO1	Ability to pronounce French words

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		CO2	Understanding of French culinary
		CO3	Ability to converse in French language
18CA3222	Introduction To Wireless & VOIP Technologies	CO1	Explain context of security in Wireless environment
		CO2	Summarize how to provide VoIP security
		CO3	Classify types of threats in Mobile, Wireless and VOIP
		CO4	Explain how security should be enforced during mobile application development
18CA3223	Introduction to Windows Azure	CO1	Define windows azure basics and cloud background
		CO2	Discuss the concepts of storage in Azure
		CO3	Summarize the process for creating and manipulating tables
		CO4	Identify the steps for creating a web site
		CO5	Illustrate how to create basic elements such as websites, SQL server etc
18CA3224	Big Data	CO1	Understand the characteristics of big data.
		CO2	Explore Hadoop framework and its components
		CO3	Use HDFS and Map Reduce to analyze various industry use cases of big data analytics.
		CO4	Understand the YARN Infrastructure.
			Learning different Sorting, Shuffling
18CA3121	Internship	CO1	Apply basic concepts learnt to solve real-time problems
		CO2	Discuss the IT organization hierarchy and working
		CO3	Identify the tools/network and their functionalities to create and test application/connectivity
		CO4	Summarize the procedures used for creating and testing applications
		CO5	Create real time applications

Academic Year :2018-2019

Academic Professor I/C

HOD-CSA

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