

Vivekanand College, Kolhapur
B. Sc. Computer science (Entire) Part – I
CBCS Syllabus with effect from June, 2018
Course Outcome (Cos) B.Sc. (Entire Computer Science)-2018-19

B.Sc. Part I (Entire Computer Science) Introduced in the year 2018-19	
Semester I	
B.Sc.-I SEM-I	AECC: English for Business Communication- BCS I A
CO No.	On Completion of the course, student will be able :
CO 1	To understand the concept, process and importance of communication.
CO 2	To gain knowledge of media of communication.
CO 3	To develop skills of effective communication - both written and oral.
CO 4	To make students familiar with information technology.
B.Sc.-I SEM-I	Course Name: Mathematics Subject Code: GEC-1300A
CO No.	On Completion of the course, student will be able to:
CO 1	Construct simple mathematical proofs and possess the ability to verify them. Comprehend formal logical arguments.
CO 2	Apply basic counting techniques of combinatorial problems. Specify and manipulate basic mathematical objects such as sets, functions and relations and will also be able to verify simple mathematical properties that these objects possess.
CO 3	Classify numbers into number sets. Determine function is one-one and Onto.
CO 4	Prove results involving divisibility & greatest common divisors. Apply Fermat's theorem to find the remainder when any large number is divided by any other integer
B.Sc.-I SEM-I	Course Name: Electronics Code : GEC-1301A
CO No.	On Completion of the course, student will be able :
CO 1	Study the current voltage characteristics of semiconductor devices, understand the behavior of basic electronic components, Explain the concept of circuit laws and network theorems and apply them to laboratory measurements
CO 2	Understand to semiconductor devices. Characteristics and biasing of diodes and transistors. Design and analysis of circuits using diodes, bipolar transistors, and field effect transistors. Application of transistors as amplifiers and switches.
CO 3	Understand basic digital electronic systems. To learn different theorems and laws for simplification of basic Digital electronics circuits. understand symbols, Truth tables, Boolean equations, & working principle
CO 4	Teach basic principles of programming. Develop skills for writing programs using 'C'.
B.Sc.-I SEM-I	Course name -Descriptive statistics-I and Discrete probability distributions Subject Code- GEC-1302 A
CO No.	On Completion of the course, student will be able :
CO 1	To classify, tabulate and represent the data graphically
CO 2	To compute and interpret various measures of central tendency, dispersion, moments, skewness and kurtosis.
CO 3	To compute probabilities by using definition and probability rules.
CO 4	To compute probabilities by using discrete probability distributions.
B.Sc.-I SEM-I	Course Name: Computer Science Code : CC-CS-1303A
CO No.	On Completion of the course, student will be able to:
CO 1	Understand Basic elements of a communication system, Data Transmission modes, Data Transmission media, Types of networking Network Topologies, Definition and declaration, Operations on pointer, Pointer initialization, Pointer And Array, Pointer of pointer, Dynamic memory allocation.



2	Understand Information Technology IT Assets and its managements, ITAct, Definition, declaration, prototype of function, Local and global variable, User defined functions, Storage classes, Recursion, Pointer and function, Call by value and Call by reference.
CO 3	Understand Database Management System, Data Models, Concept of RDBMS, RDBMS Terminologies, DBA & Responsibilities of DBA, Relational Model, Definition and declaration, Array of structures, Passing structure to function, Pointer to structure, Nested structure, self referential structure, Size of and type def, Definition of Union and declaration, Difference between structure and union.
CO4	Understand Oracle Data types, Classification of SQL commands, Data Constraints, Concept of File, Text and binary files, Opening and closing files, File opening mode.
B.Sc.-I SEM-II	AECC: English for Business Communication- BCS I B
CO No.	On Completion of the course, student will be able :
CO 1	To acquaint the students with employment communication— Writing Resume, Acquiring Interview Skills etc..
CO 2	To introduce the students with the knowledge of office management
CO 3	To develop skills of effective communication - both written and oral
CO 4	To make students familiar with modern technology
B.Sc.-I SEM-I	Course Name: Mathematics Code : GEC-1300A
CO No.	On Completion of the course, student will be able to:
CO 1	Apply principles and concepts of graph theory in practical situations. Understand applications of graph theory in areas of Computer Science, Biology, Chemistry, Physics, Sociology etc.
CO 2	To model real world problems using graph theory. To model real world problems using graph theory
CO 3	Inspect the value of the limit of a function at a point using the definition of the limit. Find the limit of a function at a point numerically and algebraically using appropriate techniques including L'Hospital's rule.
CO 4	Experiment with differentiation of exponential, logarithmic, trigonometric & inverse trigonometric functions n times. Illustrate the consequences of the intermediate value theorem for continuous functions. Show whether a function is differentiable at a point.
B.Sc.-I SEM-II	Course Name: Electronics Code : GEC-1301B
CO No.	On Completion of the course, student will be able :
CO 1	Design and analyze the basic operations of MOSFET. Know about the multistage amplifier using BJT in various configurations to determine frequency response and concept of voltage gain. Know the concept of feedback amplifier and their characteristics. Design the different oscillator circuits for various frequencies
CO 2	Understand and analyze the IC 741 operational amplifier and its characteristics. Understanding various operating modes of Op-amp and its linear/non-linear applications
CO 3	Study different types of multivibrator and wave form generator using IC555. Understand concept of memories and types of memories
CO 4	Understand the basic architecture of 8- bit microprocessors and 16 bit microprocessor. Identify the addressing modes of an instruction. Develop programming skills in assembly language. Able to write programs on 8085 microprocessor based systems
B.Sc.-I SEM-II	Course Name: Descriptive statistics-II and Continuous probability distributions and Testing of Hypothesis
	Subject code- s GEC-1302 B
CO No.	On Completion of the course, student will be able :
CO 1	Relation between two and three variables, Fitting of simple and multiple regression equations.



CO 2	Finding of probabilities of various distributions
CO 3	Knowing the relations among the different distributions with real life situations and Simulation of various distributions.
CO 4	Applying the small sample and large sample tests in various situations.
B.Sc.-I SEM-II	Course Name: Computer Science Code : CC-CS-1303B
CO No.	On Completion of the course, student will be able :
CO 1	Understand Basic elements of a communication system, Data Transmission modes, Data Transmission media, Types of networking Network Topologies, Definition and declaration, Operations on pointer, Pointer initialization, Pointer And Array, Pointer of pointer, Dynamic memory allocation.
CO 2	Understand Information Technology IT Assets and its managements, IT Act, Definition, declaration, prototype of function, Local and global variable, User defined functions, Storage classes, Recursion, Pointer and function, Call by value and Call by reference
CO 3	Understand Database Management System, Data Models, Concept of RDBMS, RDBMS Terminologies, DBA & Responsibilities of DBA, Relational Model, Definition and declaration, Array of structures, Passing structure to function, Pointer to structure, Nested structure, self referential structure, Sizeof and typedef, Definition of Union and declaration, Difference between structure and union
CO 4	Understand Oracle Data types, Classification of SQL commands, Data Constraints, Concept of File, Text and binary files, Opening and closing files, File opening mode.



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HEAD
DEPARTMENT OF B.SC. COMPUTER SCIENCE
(ENTIRE)
VIVEKANAND COLLEGE, KOLHAPUR
(AUTONOMOUS)