

**MAEER'S MIT ARTS, COMMERCE AND SCIENCE COLLEGE, ALANDI (D), PUNE**

**Course Outcomes for B.Sc.(Computer Science) Program for 2013 pattern**

**Course Name: CS-101 Problem Solving using Computer & 'C' Programming**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the basic concepts of program development statements and its syntax.
CO2:	Describe the various types of arrays and its structure.
CO3:	Define the various types of Functions and String handling mechanisms.
CO4:	Summarize the structures and Unions.
CO5:	Demonstrate the various operations performed on different types of files.
CO6:	Design and use the code and test a 'C' Program to solve a computational problem.
CO7:	Illustrate the flowchart and design an algorithm for a given problem.

**Course Name: CS-102 Database Management Systems**

Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Define the fundamentals of File processing and database processing system.
CO2:	Relate the various data model and its application.
CO3:	Relate the various normal forms and its role in DBMS.
CO4:	Describe the fundamental concepts of SQL programs.
CO5:	Construct the concepts of function, procedure, package, trigger and exception handling.
CO6:	Interpret an E R diagram.
CO7:	Design the Normalize the database.

**Course Name: CS-103 -Lab Course I (C Programming)**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Read, understand and trace the execution of programs written in C language.
CO2:	Write the C code for a given algorithm.
CO3:	Write the C code using data types & operators.
CO4:	Implement function for writing the program.
CO5:	Implement the loop control structure for writing the code.



Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO6:	Implement Programs with pointers and arrays, perform pointer arithmetic, and use the pre-processor.
CO7:	Implement the file handling for writing C code.

**Course Name: CS-104 -Lab Course II (HTML & SQL)**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Read, understand and design to create database and relation by using DDL commands.
CO2:	Design conceptual models of a database using ER modelling for real life applications.
CO3:	Implement Select, Nested queries, join on database.
CO4:	Write queries in SQL to retrieve any type of information from a data base.
CO5:	Design and implement all the basic and advance tag of HTML.
CO6:	Designing the frame and table in HTML.
CO7:	Designing website using HTML language.

**Course Name: MTC-101 Discrete Mathematics**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Recall sets, cardinality of set, operations on set
CO2:	Define equivalence relations & partial ordering relations.
CO3:	Describe relations, types of relations, equivalence relations and partial ordering relations, digraphs of relations, matrix representation and composition of relations.
CO4:	Identify the difference between Product Rule & the Sum Rule.
CO5:	Discover Disjunctive normal form & Conjunctive normal Form of Boolean functions and Calculate transitive closure using Warshall's Algorithm.
CO6:	Analyze the Inclusion- Exclusion Principle.
CO7:	Differentiate between Homogeneous and nonhomogeneous Recurrence Relations

**Course Name: MTC-102 Algebra and Calculus**

Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Find G.C.D and L.C.M. of numbers.
CO2:	Understand the concept of Congruence relations.



Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO3:	Define continuity of function at certain points
CO4:	Recall geometrical meaning of Differentiation.
CO5:	Calculate nth derivative of function.
CO6:	Explain L'Hospital rule
CO7:	Carry out matrix operations, Solve systems of linear equations using multiple methods, including Gaussian elimination and LU Factorization.
CO8:	Understand the concepts of rank of matrix, row rank and column rank.

**Course Name: MT-103 Mathematics Practical**

Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Prepare logical statements using logical connectives.
CO2:	Solve recurrence relations
CO3:	Solve problems on Groups
CO4:	Identify connected graph, disconnected graph.
CO5:	Classify different types of graphs.
CO6:	Identify the continuity of functions at various points.
CO7:	Solve system of linear equations.

**Course Name: ELC-101 Principles of Analog Electronics**

Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Understand working of semiconductor devices like Diodes, BJT and MOSFET.
CO2:	Distinguish between BJT and MOSFET.
CO3:	Acquire basic knowledge on the working of various semi-conductor devices.
CO4:	Develop analysis capability in BJT and FET Amplifier Circuits.
CO5:	Calculate resolution, error and accuracy of ADC and DAC.
CO6:	Understand various elementary electronic circuits such as power supplies and oscillators.
CO7:	Be familiar with data converters which is helpful in real life applications.



Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO8:	Acquire the knowledge about the characteristics and working principles of semiconductor diodes, Bipolar Junction Transistor.

**Course Name: ELC 102- Principles of Digital Electronics**

Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Understand the different number systems which are used in digital electronics.
CO2:	Acquire knowledge on basic digital electronic gates.
CO3:	Reduce any complex logic circuit into simple logic circuit by applying the Boolean algebra and K-Map techniques.
CO4:	Analyze how the combinational circuits work in digital electronics
CO5:	Distinguish different logic families used in VLSI technology.
CO6:	Get an insight about the basic introduction of Digital electronics.
CO7:	Interpret the role of digital electronics in various fields such as computer systems, VLSI technology etc.

**Course Name: ELC 103- Electronics Practical course**

Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Recognize various electronic components and their usage in electronic circuits also Know the working and Applications of various Diodes
CO2:	Identify different electronic components & is familiar with its working principle and Study different meters and instruments for measurement of electrical quantities.
CO3:	Build small hobby projects in Electronics by making use of active, passive components.
CO4:	Use different integrated circuits in their projects with the help of basic knowledge of ICT Technology.
CO5:	Perform simulations for designing and analyzing diode/transistor circuits
CO6:	Understand different types of DAC and their performance parameters



**Course Name:- ST-101 Statistical Methods-I**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Tabulate statistical information given in descriptive form.
CO2:	Use graphical techniques for data interpretation and interpret it.
CO3:	Compute various measures of central tendency, dispersion, skewness and kurtosis.
CO4:	Distinguish between univariate, bivariate and multivariate data.
CO5:	Compute the correlation coefficient for bivariate data and interpret it.
CO6:	Use the regression (linear, non-linear and multiple) and Time series techniques for forecasting purpose.
CO7:	Summarize and analyze the data using MS-Excel.
CO8:	Fit the regression models and check the goodness of fit using MS-Excel.

**Course Name: ST-102 Statistical Methods-II**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Distinguish between random and non-random experiments.
CO2:	Calculate the simple and conditional probabilities of events.
CO3:	Calculate the posterior probabilities by using Bayes' theorem.
CO4:	Apply standard probability distribution to real life situations.
CO5:	Calculate the mean and variance of continuous random variable.
CO6:	Apply parametric and non-parametric tests to real life situations.
CO7:	Use the simulation techniques to generate random sample from the distributions like, uniform, exponential and normal.
CO8:	Fit the probability models using MS-Excel.
CO9:	Simulate the random numbers from given distributions using MS-Excel.

**Course Name- ST-103 Statistics Practical (Paper-III)**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Calculate measures of central tendency and dispersion viz. Mean, mode, median, variance, standard deviation and coefficient of variation and interpret them.
CO2:	Calculate measures of moments, skewness and kurtosis and interpret the nature of the



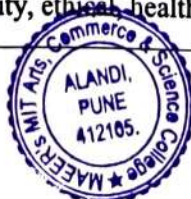
Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
	representation of the data in the real world.
CO3:	Demonstrate the principles behind systematic database design approaches by covering conceptual design, logical design through normalization.
CO4:	Learn and apply Structured query language (SQL) for database definition and database manipulation.
CO5:	Illustrate the RDBMS concepts and explain the concepts of security of database
CO6:	Explain various concepts of transactions & deadlock and find transactions trapped in it.
CO7:	Express database crash and recovery management.

**Course Name: CS-221 Object Oriented Concepts Using C++ Programming**

Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Inculcate information on Object-oriented programming concepts using C++ by discussing fundamentals and basic concepts of object-oriented programming concepts includes classes, objects, virtual functions, inline functions, friend functions, strings, Exceptions, pointers and files.
CO2:	Explain the top-down and bottom-up programming approach and use a bottom up approach to solve real world problems.
CO3:	Describe the concept of inheritance and use it for real world problems.
CO4:	Discuss the generic data type for the data type independent programming which relates it to reusability.
CO5:	Handle large data set using File I/O.
CO6:	Illustrate the process of data file manipulations using C++.

**Course Name: CS-222 Software Engineering**

Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Define and explain the fundamental facts in science, mathematics, fundamentals of computer science, software engineering and multidisciplinary engineering to begin in practice as a software developer.
CO2:	Design as well as prepare a system, components of System, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, manufacturability, sustainability, ethical, health and safety.



Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO3:	Explain the techniques, skills, and modern engineering tools necessary for S/W Development practice.
CO4:	Differentiate, design and manage the development of a computing-based system, component or process to meet desired needs within realistic constraints in one or more application domains.
CO5:	Get the awareness about the system, construct some logic, interpret the overall system/process to estimate the given problem and after it construct an application to produce a desired result/solution.
CO6:	Demonstrate an understanding of and apply current theories, models, and techniques that provide a basis for the software lifecycle.

**Course Name: CS 223-Lab Course 1 (DS & CPP)**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Implement basic data structures such as arrays and linked list.
CO2:	Design programs to demonstrate fundamental algorithmic problems including Tree Traversals, Graph traversals, and shortest paths.
CO3:	Implement various searching and sorting algorithms.
CO4:	Design programs to demonstrate the implementation of various operations on stack and queue.
CO5:	Develop solutions for a range of problems using objects and classes.
CO6:	Design programs to demonstrate the implementation of constructors, destructors and operator overloading.
CO7:	Apply fundamental algorithmic problems including type casting, inheritance, and polymorphism.
CO8:	Understand generic programming, templates, file handling.

**Course Name: CS 224 -Lab Course II (Database Practical& Mini Project)**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Implement Basic DDL, DML and DCL commands.
CO2:	Understand Data selection and operators used in queries and restrict data retrieval and control the display order.
CO3:	Write sub queries and understand their purpose.



Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO4:	Use Aggregate and group functions to summarize data.
CO5:	Join multiple tables using different types of joins.
CO6:	Prepare SRS document, design document, test cases and software configuration management and risk management related document.

**Course Name: MT-211 Applied Algebra**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Describe real vector spaces and subspaces and apply their properties.
CO2:	Explain about Linear independence, Basis, dimensions, Row space, Column space, null space, Rank and Nullity.
CO3:	Demonstrate the knowledge of definitions of Eigen values and eigenvectors.
CO4:	Explain about Diagonalization of matrix and Quadratic forms.
CO5:	Identify Linear Transformations, General linear transformations and estimate Kernel and range, Rank nullity theorem.
CO6:	Describe Inverse linear transformation, Matrix of general linear transformation.
CO7:	Analyze Groups and Coding and also explain about Cyclic group, normal subgroup, products and quotients of groups.
CO8:	Apply the knowledge of Coding, decoding of binary information in error detection, error correction and Public key cryptology.

**Course Name: MT-212 Numerical Analysis**

Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Demonstrate understanding of common numerical methods and how they are used to obtain approximate solutions to mathematical problems.
CO2:	Apply numerical methods to obtain approximate solutions to mathematical problems.
CO3:	Construct a function which closely fits given n- points in the plane by using different interpolation formulae.
CO4:	Express the intermediate value theorem.
CO5:	Using appropriate numerical methods, determine the solutions to given non-linear equations.





**Course Name: MT-221 Computational Geometry**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Discuss applications of Computational Geometry to graphical rendering.
CO2:	Apply geometric techniques to real-world problems in graphics.
CO3:	Get acquainted with the typical problems of computational geometry.
CO4:	Understand the existing solutions and their applications in computer graphics and machine vision.
CO5:	Implement algorithms of triangulation and of two-dimensional convex hull generation in geometric problems.
CO6:	Demonstrate the ability to implement the algorithms in the course
CO7:	Demonstrate the ability to do mathematical derivation of the algorithms in the course.
CO8:	Get deeper knowledge of mathematics in relation to computer graphics and to understand the foundations of geometric algebra.
CO9:	Know the history of mathematics and its past, present and future role as part of our culture.
CO10:	Apply their skills and knowledge, that is, translate information presented verbally into mathematical form, select and use appropriate mathematical formulae or techniques in order to process the information and draw the relevant conclusion.
CO11:	Get an adequate exposure to global and local concerns that explore them many aspects of Mathematical Sciences.
CO12:	Describe and construct basic geometric shapes and concepts by computational means.

**Course Name: MT-222 Operations Research**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Define the types of the variables used in Operations Research.
CO2:	Interpret the real -life production or inventory problems as LPP models.
CO3:	Choose the proper method for solving the problem.
CO4:	Construct the LPP models
CO5:	Analyze the given conditions to understand the model for profit or loss.
CO6:	Understand the importance of strategy making.



**Course Name: MT-223 Mathematics Practical**

Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Use basic commands in Scilab.
CO2:	Implement numerical methods using Scilab Programming.
CO3:	Write efficient, well-documented Scilab code and present numerical results in an informative way.
CO4:	Understand basic commands and codes in C-programming.
CO5:	Make use of TORA for solution of L.P.P., Transportation and Assignment Problem.

**Course Name: ELC 211 Digital system Hardware Student:**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Learns the basics of Digital Systems.
CO2:	Understand the working of a microprocessor.
CO3:	Use different logic gates and minimization techniques like laws of Boolean Algebra and K-map.
CO4:	Design and implement different logic circuits such as Counter, random sequence generator etc.
CO5:	Get familiar with core architecture of microprocessor and its entire primary feature with their applications.
CO6:	Get familiar with types of memory and its working principle.
CO7:	Get acquainted with concepts of multiprocessor and multicore architecture.

**Course Name: ELC 212 Analog Systems**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Understand the concept of analog electronic system.
CO2:	Analyze different types of sensor its parameters, working principle and applications.
CO3:	Understand different blocks of signal conditioning circuits and its role in analog electronic systems. They also get familiar with data converters which is helpful in real life applications.
CO4:	Understand the working of data convertor circuits and their applications in analog electronic system.



Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO5:	Integrate the sensors, signal conditioning circuits, data converters and actuators to design real life application circuits of analog electronic system.
CO6:	Apply the knowledge of analog circuits in different applications.

**Course Name: ELC 221-8051 Architecture, Interfacing & Programming**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Differentiate microprocessor and microcontroller.
CO2:	Describe the architecture of 8051 and able to write assembly language program for 8 bit microcontroller.
CO3:	Understand the basic architecture of 8051 microcontroller with its Programming model, assembly Instruction set and Organization.
CO4:	Design a stand-alone system through programming and interfacing techniques.
CO5:	Design program to interface LCD, Stepper motor, ADC and DAC.
CO6:	Compare PIC and ARM, advanced microcontroller, which are the basic building block element of an Embedded System.
CO7:	Write advanced microcontroller programming for real life application.

**Course Name: ELC 222-Communication Principles Student:**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Understand the basics of Electronic Communication System.
CO2:	Get acquainted with concepts of modulation, demodulation and multiplexing techniques.
CO3:	Understand and identify the fundamental concepts and various components of analog communication systems.
CO4:	Understand the basics of Communication System with transmission medium and modulation schemes; understand the concepts of cellular systems.
CO5:	Know and learn the basics of communication systems and telephone system.
CO6:	Enumerate the latest digital communication techniques like GSM, GPRS etc.
CO7:	Know the difference between wired and wireless communication and different types of advanced wireless communication techniques, such as Bluetooth, Wi-Fi, RFID and Zigbee.



**Course Name: ELC 203-Electronics Practical**

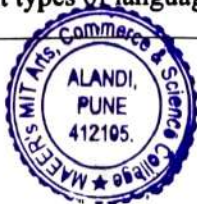
Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Interface the basic peripherals to 8051 based micro-controllers for real world applications and study of hardware and software tools. They will understand the basics of Electronic Communication System.
CO2:	Understand principles of sensors their characteristics
CO3:	Design Traffic Light Control System.
CO4:	Construct, test and verify the design and implementation of logic.
CO5:	Know sensor-based signal conditioning through ADC/DAC converter.
CO6:	Do real world programming using 8051 Microcontroller by integrating firmware and hardware to become an embedded system.
CO7:	Understand concepts of modulation and multiplexing.

**TY B.Sc.(CS) Course Name: CS-331 System Programming & Operating System**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Describe the basic components of an operating system and their role in implementations for general purpose, real-time and embedded applications.
CO2:	Define the concepts of processes, threads, asynchronous signals and competitive system resource allocation.
CO3:	Explain what multi-tasking is and outline standard scheduling algorithms for Multi-tasking.
CO4:	Discuss mutual exclusion principles and their use in concurrent programming including semaphore construction and resource allocation.
CO5:	Expose the details of major operating system concepts, overview of system memory management and the implementation of file systems.
CO6:	Explain the basics of system programs like editors, compiler, assembler, linker, loader, interpreter and debugger.
CO7:	Describe the various concepts of assemblers and microprocessors.

**Course Name: CS-332 Theoretical Computer Science**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Discuss about the different types of language & their application.



Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO2:	Describe the role of the Finite Automata.
CO3:	Describe the role of the Regular expression & its real -life application in programming.
CO4:	Explain the use of context free languages.
CO5:	Explain the push down automata.
CO6:	Identify and design Turing machine.

**Course Name: CS-333 Computer Networks**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Inculcate information on Networking concepts and technologies like wireless, broadband.
CO2:	Explain the local, metropolitan and wide area networks using the Standard OSI reference model.
CO3:	Choose various networking technologies.
CO4:	Classify the concepts of protocols, network interfaces and categorize of performance issues in local area networks and wide area networks.
CO5:	Summarize wireless networking concepts, contemporary issues in networking technologies, network tools and network programming.
CO6:	Design of different types of protocol and the comparison of number of data link, network and transport layer protocols.
CO7:	Identify and understand various techniques and modes of transmission.
CO8:	Describe data link protocols, multi-channel access protocols and IEEE 802 standards for LAN. Learners will be able to understand network security and define various protocols such as FTP, HTTP, Telnet, DNS

**Course Name: CS-334 Internet Programming -I**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Describe the features like functions, forms in PHP, Files handling, OOPs concepts, Cookies, Sessions and Database, draw images on the server with AJAX.
CO2:	Write PHP programs.
CO3:	Describe, Classify and use the role languages like HTML, CSS, XML, JavaScript and protocols in the workings of web and web applications.



Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO4:	Explain about network and security programming using Java and state about the application of dynamic page functionality in web pages using CGI, Servlets, JSP, ASP.
CO5:	Design and communicate between client and server using Java and construct a good, effective and dynamic website.
CO6:	Implement interactive web page(s) using HTML, CSS and JavaScript.
CO7:	Build Dynamic web site using server-side PHP Programming and Database connectivity.

**Course Name: CS-335 Java Programming - I**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Inculcate facts about Programming logic concepts to design a wide range of Applications and Applets using Java by perceiving the fundamentals of object-oriented programming in Java, including defining classes, invoking methods, using class libraries, etc.
CO2:	Explain the programming language design, syntax and semantics.
CO3:	Describe the critical thinking skills through solving programming problems and modify the existing code.
CO4:	Distinguish the standard syntax for java programs and other programming Tools.
CO5:	Distinguish the different kind of streams used in java programming language.
CO6:	Describe the animation and events based advanced java program concepts (Applet).
CO7:	Write the java programs using object-oriented class with parameters, constructors, utility, calculations, methods including inheritance, test classes and exception handling. The learners will be able to develop the new application/projects

**Course Name: CS-336 Object Oriented Software Engineering**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	State and describe various O-O concepts along with their applicability contexts.
CO2:	Identify domain objects, their properties, and relationships among them.
CO 3:	Identify and model/represent domain constraints on the objects and (or) on their relationships.
CO4:	Develop design solutions for problems on various O-O concepts.
CO5:	Distinguish various modelling techniques to model different perspectives of object-oriented software design (UML).



Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO6:	Plan software development life cycle for Object-Oriented solutions for Real-World Problems.

**Course Name: CS-341 Operating System**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Describe the role of operating system in their management policies and algorithms.
CO2:	Know about the services provided by operating systems.
CO3:	Understand the process management policies and scheduling of processes by CPU.
CO4:	Describe and analyze the memory management and its allocation policies.
CO5:	Identify the need to create the special purpose operating system.
CO6:	Understand the structure of operating systems, applications, and the relationship between them.

**Course Name: CS-342 Compiler Constructions**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Define the phases of a typical compiler, including the front- and backend.
CO2:	Learn working of compiler and non-compiler applications.
CO3:	Identify tokens of a typical high-level programming language, regular expressions for tokens and design and implement a lexical analyzer using a typical scanner generator.
CO4:	Know about Code Optimization and compiler generation tools and techniques.
CO5:	Design a compiler for a simple programming language.
CO6:	Explain the role of different types of runtime environments.

**Course Name: CS-343 Computer Networks**

Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Inculcate knowledge on Networking concepts and network security concepts.
CO2:	Explain the protocols at transport layer such as UDP, TCP and SCTP.
CO3:	Choose from various encryption techniques to encode plaint text.
CO4:	Classify the connecting devices working at each.



Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO5:	Summarize wired and wireless networking concepts, networking technologies, network tools and network security concepts.
CO6:	Design different types of protocol at application layer such as DNS, EMAIL, HTTP, WWW etc.

**Course Name: CS-344 Internet Programming – II**

Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Learn different technologies used at client Side Scripting Language.
CO2:	Learn XML,CSS and XML parsers.
CO3:	Learn One PHP framework for effective design of web application.
CO4:	Learn JavaScript to program the behavior of web pages.
CO5:	Learn AJAX to make our application more dynamic.
CO6:	Handle email with PHP and email structure.

**Course Name: CS-345 Programming in Java - II**

Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Learn Object Oriented Programming language to handle abnormal termination of a program using exception handling.
CO2:	Learn database programming using Java.
CO3:	Study web development concept using Servlet and JSP.
CO4:	Develop a game application using multithreading.
CO5:	Learn socket programming concept.
CO6:	Develop the new web/standalone application.

**Course Name: CS-346 Computer Graphics**

Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Summarize concept Graphics concepts.
CO2:	Provide comprehensive introduction about computer graphics system, design algorithms and two-dimensional transformations.





Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO3:	Demonstrate techniques of clipping, three dimensional graphics and three dimensional transformations.
CO4:	Describe and summarize the design, development and testing of modeling, rendering, shading and animation.
CO5:	Understand the basics of computer graphics, different graphics systems and applications of computer graphics.
CO6:	Discuss various algorithms for scan conversion and filling of basic objects and their comparative analysis.
CO7:	Use of geometric transformations on graphics objects and their application in composite form.

**Course Name: CS 347 -Lab Course I (SYSPRO & OS)**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Design and implement systems programs with minimal features to understand their complexity.
CO2:	Design and implement simulations of operating system level procedures.
CO3:	Develop programs for assembly language.
CO4:	Learn the mechanism involved in memory management in OS.
CO5:	Gain knowledge on operating system concepts that includes CPU scheduling algorithm, Bankers algorithm etc.
CO6:	Learn programmatically to implement simple OS mechanism i.e. Shell Programming.
CO7:	Learn file management system of OS.

**Course Name: CS 348 -Lab Course II (Programming in JAVA I& II& Computer Graphics)**

Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Implement Object Oriented programming concept using basic syntaxes of controls Structures, strings and function for developing of logic.
CO2:	Implement classes, objects, members of a class and the relationships among them and find the solution to problem.
CO3:	Implement reusability using inheritance, interfaces and packages.
CO4:	Understand and implement the use of different exception handling mechanisms and



<b>Sr.No.</b>	<b>Course Outcomes (COs) -This course will enable the learners to:</b>
	concept of multithreading for application development.
CO5:	Design GUI in Java using Applet & AWT along with events.
CO6:	Design, develop and implement complex Graphical user interfaces.

**Course Name: CS 349 -Lab Course III (Internet Programming& Project)**

<b>Sr.No.</b>	<b>Course Outcomes (COs) -This course will enable the learners to:</b>
CO1:	Understand, analyze and apply the role of languages like HTML, DHTML, CSS, JavaScript and PHP.
CO2:	Analyze a web page and identify its elements and attributes.
CO3:	Create web pages using HTML and Cascading Style Sheets.
CO4:	Create dynamic web pages using JavaScript, XML.
CO5:	Build web applications using PHP.
CO6:	Understand to connect webpage with any database.
CO7:	Design website using HTML& PHP language.

*R.Lad*  
**Prof. Rashmi Lad**  
**HOD**

*B. B. Waphare*  
**Dr. B. B. Waphare**  
**Principal**



**MAEER'S MIT ARTS, COMMERCE AND SCIENCE COLLEGE, ALANDI (D), PUNE**

**Course Outcomes for B.C.A./B.B.A.(Computer Applications) Program for 2013 pattern**

**Course Name: 101-Modern Operating Environment & MS Office**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain basic concepts in operating system and their application.
CO2:	Explain concept of hardware, software and input and output devices.
CO3:	Describe working of computer and memory concept.
CO4:	Explain concept of Operating system.
CO5:	Solve the binary, decimal and octal arithmetic.
CO6:	Explain the concepts of networking, topologies etc.

**Course Name: 102- Financial Accounting**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Use knowledge in setting up a computerized set of accounting books.
CO2:	Explain progressive affective domain development of values, the role of accounting in society and business.
CO3:	Explain relevant financial accounting career skills.
CO4:	Use both quantitative and qualitative knowledge to their future careers in business.
CO5:	Describe relevant managerial accounting career skills, applying both quantitative and qualitative knowledge to their future careers in business.
CO6:	Apply thorough systematic and subject skills within various disciplines of commerce, business, accounting, economics, and finance, auditing and marketing.
CO7:	Identify features and roles of businessmen, entrepreneur, managers, consultant, which will help learners to possess knowledge and other soft skills and to react aptly when confronted with critical decision making.
CO8:	Show proficiency with the ability to engage in competitive exams like CA, CS, ICWA and other courses.

**Course Name: 103- Principles of Programming and Algorithms**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Develop Logical & Analytical Thinking.
CO2:	Implement Problem Solving Techniques.
CO3:	Develop algorithms and flowcharts.
CO4:	Calculate complexity of algorithms.
CO5:	Convert algorithms & flowcharts in C Programs
CO6:	Generate output through algorithms using Dry Run Technique



Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO7:	Develop and design the algorithms for problems on Matrix.
CO8:	Apply logics for solving mathematical problems through algorithms.

**Course Name: 104 - Business Communication**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the concept of communication and importance of communication.
CO2:	memories various terms used in the speaking while communicating.
CO3:	Express the topic very effectively.
CO4:	Produce their own meanings of the terms they received on the topics.
CO5:	Show their skills in presentation and group activities.
CO6:	Discuss and demonstrate the various terms in vocabulary.
CO7:	Use their potential in the individual and group activities.
CO8:	List down the grammatical terms in English.

**Course Name: 105 - Principles of Management**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the fundamental knowledge about working of business organization through the process management.
CO2:	Describe the concept of management process, functions and principles.
CO3:	Discuss with recent trends in management.
CO4:	Explain basic concept of organization and business administration.
CO5:	Interpret the basic principles of management - acquainted with management process, functions and principles. Students got the idea about new developments in management.
CO6:	Develop managerial skills among them.

**Course Name: 106 - CLPW**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Apply the knowledge of MS word, Excel, Power Point and Access practically.
CO2:	Use the software scratch for problem solving.
CO3:	Apply the knowledge of Financial Accounting using Tally.
CO4:	Demonstrate his theoretical knowledge practically in Computer Laboratory.

**Course Name: 201 - Procedure Oriented Programming using C**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain Logical & Programming concepts.



Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO2:	Apply Problem Solving Techniques while writing programs.
CO3:	Write Programs in C Language.
CO4:	Describe and handle data structures based on problem subject area.
CO5:	Identify textual information, characters and strings in programs.
CO6:	Work with arrays of compound objects.
CO7:	Implement a concept of object thinking within the framework of functional model.
CO8:	Implement a concept of functional hierarchical code organization.

### Course Name: 202 - Data Base Management System

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the concept of how to organize, maintain and retrieve information - efficiently, and effectively - from a DBMS.
CO2:	Differentiate between different types of Data Models.
CO3:	Design ER-models to represent simple database application scenarios.
CO4:	Convert the ER-model to relational tables, populate relational database.
CO5:	Formulate SQL queries on data.
CO6:	Explain the relational algebra and SQL.
CO7:	Design the database by using the concept of normalization

### Course Name: 203 - Organizational Behavior

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Classify the impact of individual, group and structures on employees behavior within the organizations.
CO2:	Use the knowledge they have received for the betterment of the organization.
CO3:	Describe the human interactions in an organization, find what is driving it and influence it for getting better results in attaining business goals.
CO4:	Describe motivation and conflict management strategies
CO5:	Explain the importance of team building and effective teamwork

### Course Name: 204 - Computer Applications in Statistics

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Apply the power of excel spreadsheet in computing summary statistics.
CO2:	Interpret the concept of various measures of central tendency and variation and their importance in business.
CO3:	Solve the concept of probability, distributions and simulation in business world.



Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO4:	Solve the concept of Curves like ogive, Histogram etc.
CO5:	Apply feature of excel to design histogram and graphs.
CO6:	Describe the business profit and loss using graphs.
CO7:	Explain the model sampling form for binomial distributions.

**Course Name: 205 - E-Commerce Concepts**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the concept of online transactions.
CO2:	Describe types of business and methodologies of business process.
CO3:	Use website, security and electronic payment system.
CO4:	Use online transactions easily in real life.
CO5:	Explain the concept of credit card and debit card technically.
CO6:	Use the concept of NEFT and RTGS technically in depth.
CO7:	Explain the process of encryption and decryption related to security purpose of business transaction.

**Course Name: 206 - CLPW**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Apply the knowledge of DBMS practically.
CO2:	Develop programs using the 'C Programming' for problem solving.
CO3:	Apply the knowledge of Financial Accounting using Tally.
CO4:	Demonstrate theoretical knowledge practically in Computer Laboratory.

**Course Name: 301 - Relational Database Management System**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Manipulate the database using PLSQL blocks such as Procedure, Cursor, Trigger, Function and Packages.
CO2:	Differentiate serializable schedule, Non-Serializable schedule using precedence graph.
CO3:	Find transactions in deadlock and learn how to handle that deadlock.
CO4:	Illustrate transaction recovery and perform identify Redo, Undo and rollback actions after system Crash.
CO5:	Point out restrictions on database using user defined and named exceptions for insert, update and deleting data.
CO6:	Discriminate between database and relational database concepts.
CO7:	Illustrate immediate and different update techniques for data recovery of transactions.



**Course Name: 302 - Data Structure Using C**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the different methods to organize large amount of data.
CO2:	Explain how different data structures are used in operating system to handle processes.
CO3:	Create the programs using the concept of Pointers, Structures & Dynamic Memory Allocation.
CO4:	Classify various types of Data Structures.
CO5:	Express diverse methods for traversing trees.
CO6:	Evaluate alternative implementations of data structures with respect to performance.
CO7:	Choose the suitable type of Data Structure to implement the programs.

**Course Name: 303 - Operating System**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Get core knowledge of Operating System.
CO2:	Classify concepts of system programming.
CO3:	Categorize services provided by operating system and scheduling concepts.
CO4:	Analyze memory management techniques and resource management in Operating System.
CO5:	Implement the process management policies.
CO6:	Solve problems on scheduling of processes.
CO7:	Solve different problems of memory management techniques, Disk Scheduling.
CO8:	Determine an OS as a resource manager, file system manager, process manager, memory manager and I/O manager.

**Course Name: 304 - Business Mathematics**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Solve quantitative skills.
CO2:	Explain the concept of profit and loss, simple interest, transportation problems, matrices and how to solve them.
CO3:	Explain the concept of ratio, proportion and percentage.
CO4:	Explain the concept of direct proportion, inverse proportion.
CO5:	Explain the concept of trade discount, cash discount, commission and brokerage.
CO6:	Explain the concept of simple interest, compound interest, EMI.
CO7:	Solve Linear equations and LPP problems.



**Course Name: 305 - Software Engineering**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the software development process in depth.
CO2:	Draw software context level diagrams.
CO3:	Explain the concept of Software project methods, configuration.
CO4:	Explain concept of software testing and its types.
CO5:	Describe the concept of requirement of software, system analysis, system design.
CO6:	Explain the types of cohesion, coupling and its types, and modules.
CO7:	Develop mini project using the concept of ERD, CLD, DFD.
CO8:	Describe the techniques of various models like waterfall, SDLC and so on.

**Course Name: 306 - CLPW**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Apply the knowledge of RDBMS practically.
CO2:	Use the concepts of Data Structures and C Language for problem solving.
CO3:	Demonstrate his theoretical knowledge practically in Computer Laboratory.

**Course Name: 401 - OOPs Using C++**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the concepts of OOPs and the issues involved in effective class design.
CO2:	Differentiate between the Object Oriented Programming and Procedure Oriented Programming.
CO3:	Relate OOPs concepts such as information hiding, constructor, destructor, inheritance with real world
CO4:	Create C++ programs that use OOPs concepts such as information hiding, constructor, destructor, inheritance.
CO5:	Describe advanced features of C++ specifically stream I/O, templates and operator overloading.
CO6:	Develop the C++ application using file handling.
CO7:	Implement the C++ programs using exception handling.

**Course Name: 402 - Programming in VB**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain properties and events, methods of controls.
CO2:	Solve how to handle events of different controls.
CO3:	Use the active controls.





Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO4:	Design VB application.
CO5:	Implement connectivity between VB and databases.
CO6:	Develop a Graphical User Interface (GUI) based on problem description.
CO7:	Demonstrate knowledge of programming terminology and how to apply using Visual Basic (e.g., variables, selection statements, repetition statements, etc.).

**Course Name: 403 - Computer Networking**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain about computer network.
CO2:	Explain about various network topologies.
CO3:	Identify the different types of network devices and their functions within a network
CO4:	Explain the use of connecting device used in network.
CO5:	Explain key networking protocols, and their hierarchical relationship in the context of a conceptual model, such as the OSI and TCP/IP framework.
CO6:	Explain and analyze different wired and wireless technologies.
CO7:	Identify the different types of network topologies and protocols.

**Course Name: 404 - Enterprise Recourse Planning**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Describe the concept of ERP.
CO2:	Classify different ERP technologies.
CO3:	Explain and define and motivating the need for integrated systems.
CO4:	Prepare focus solely on one ERP vendor's products.
CO5:	Use the process modelling techniques in one or more modelling environments.
CO6:	Choose reengineered business processes for successful ERP implementation. Focus solely on one ERP vendor's products.
CO7:	Relate the Design the ERP implementation strategies.

**Course Name: 405 - Human Resource Management**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the concept of HRM and its different functions in an organization.
CO2:	Describe the HRM Process concerned with planning, motivating and developing suitable employees for the benefit of the organization.



Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO3:	Explain the process and functions of organization
CO4:	Connect the concept of management of an organization.
CO5:	Use the concept of human resource management like salary calculation, gratuity, PF.
CO6:	Calculate Bonus, and PPF and leave calculation of employees.
CO7:	Develop mini project for any organization regarding HR process, and functions of management
CO8:	Plan the resource functions for any related to HR functionality of any company.

**Course Name: 406 - CLPW**

Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Apply the knowledge OOP concepts and develop programs using C++ Programming Language practically.
CO2:	Use the concepts of VB for designing GUI and problem solving.
CO3:	Demonstrate his theoretical knowledge practically in Computer Laboratory

**Course Name: 501 - Java Programming**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the basic concepts of Java Programming.
CO2:	Use the Java Programming in Day to Day Applications.
CO3:	Explain the concepts of object oriented programming.
CO4:	Describe the concepts of abstraction, inheritance etc.
CO5:	Describe the fundamental features of JAVA programming such as platform independence, garbage collector etc.
CO6:	Develop the java application using file handling.
CO7:	Use the different classes given in collection framework.

**Course Name: 502 - Web Technology**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Describe concept of internet application, HTML Tags.
CO2:	Differentiate Functioning of Database Web Application and Static Web Application.
CO3:	Develop static web applications using HTML and Java script.
CO4:	Develop Styles for Static Web Applications using CSS.
CO5:	Develop HTML form Validation programs using JavaScript.
CO6:	Develop HTML form Validation programs using PHP.



Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO7:	Develop dynamic web applications using PHP (without database Programming).

**Course Name: 503 - Dot Net Programming**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Build applications using VB.Net.
CO2:	Apply ADO.Net.
CO3:	Retrieve data from SQL Server using VB.NET.
CO4:	Use the features of Dot Net Framework along with the features of VB.NET.
CO5:	Use ADO.Net, Connection object, Data Reader, Data Adapter, Command Object.
CO6:	Create Classes & objects, properties & methods, object oriented techniques etc.
CO7:	Demonstrate various data types & variables, using the .net framework, branching & flow control.
CO8:	Implement mini-Projects using VB.NET.

**Course Name: 504 - Object Oriented Software Engineering**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain concept of system design using UML.
CO2:	Describe System development through object oriented techniques.
CO3:	Define employment in technical positions in software houses and with large-scale scientific and engineering users.
CO4:	Describe how to work with other people in a team, communicating computing ideas effectively in speech and in writing.
CO5:	Explain the design and communicate ideas about software system solutions at different levels.
CO6:	Relate an appreciation of the cost, quality, and management issues involved in software construction.
CO7:	Describe how to demonstrate component and deployment diagram.

**Course Name: 505 - Project**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Design the software using concepts of SDLC and SE.
CO2:	Design the database using concepts of DBMS and RDBMS.
CO3:	Develop software using VB.
CO4:	Apply his theoretical knowledge practically to solve real life problems.



**Course Name: 506 – CLPW**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Apply the knowledge of WT and design the website.
CO2:	Use the concepts of Dot Net for GUI designing and problem solving.
CO3:	Apply the concepts of Core JAVA Programming for Problem solving.
CO4:	Demonstrate his theoretical knowledge practically in computer laboratory.

**Course Name: 601 - Advanced Web Technologies**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Recall concepts of XML language.
CO2:	Explain Ajax Concepts with database connectivity.
CO3:	Demonstrate the connectivity of PHP with Database Connectivity.
CO4:	Develop their own tags and write a code for XML Programming Language.
CO5:	Write programs based on client side scripting as well as server side scripting.
CO6:	Differentiate predefined tags and user defined tags.
CO7:	Formulate PHP and MYSQL database.

**Course Name: 602 - Advanced Java**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the concepts of distributed applications.
CO2:	Differentiate between client side programming and server side programming.
CO3:	Describe the importance of session tracking and how to handle it.
CO4:	Develop distributed application.
CO5:	Develop application using database and connectivity through JAVA.
CO6:	Develop application by using Remote Method Invocation.
CO7:	Develop web based applications.

**Course Name: 603 - Recent Trends in IT**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Describe upcoming trends in Information technology.
CO2:	Discuss eco-friendly software development.
CO3:	Use mobile computational capabilities into solving daily problems.
CO4:	Integrate with each other over the Internet thus opening gates for lots of other domains such cyber security, cryptography, networking etc. .
CO5:	Explain soft computing and optimization tools like fuzzy logic, evolutionary computing to increase capability.



Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO6:	Solve problems of cryptography in optimal time.
CO7:	Relate currently available models, technologies, approaches for building distributed database systems and services.
CO8:	Identify the functionality of the various data mining and data warehousing component.

**Course Name: 604 - Software Testing**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Describe the process of software testing and various concepts for testing software.
CO2:	Describe about various testing strategies and techniques.
CO3:	Express about how to go for testing to find bugs in software.
CO4:	Develop programming logic as per testing strategies.
CO5:	Explain various testing methods for specialized Environments.
CO6:	Describe and differentiate various software testing tools.
CO7:	Differentiate various types of testing to apply for testing of software.

**Course Name: 605 - Project**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Design the software using concepts of SDLC and SE.
CO2:	Design the database using concepts of DBMS and RDBMS.
CO3:	Develop software using JAVA or Dot Net Programming.
CO4:	Apply his theoretical knowledge practically to solve real life problems.

**Course Name: 606 – CLPW**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Apply the knowledge of AWT design the website and dynamic Web Pages.
CO2:	Use the concepts of JDBC for Database connectivity.
CO3:	Apply the concepts of Adv JAVA for distributed applications and Problem solving.
CO4:	Demonstrate his theoretical knowledge practically in computer laboratory.



Prof. Akshada Kulkarni

**HOD**




Dr. B. B. Waphare

**Principal**

MAEER'S MIT ARTS, COMMERCE AND SCIENCE COLLEGE, ALANDI (D), PUNE

Course Outcomes for B.B.A. Program for 2013 pattern

Course Outcomes (COs): Course Name: 101- Business Organization and System

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Describe various activities of business practices and recent trends in business world.
CO2:	Get acquainted with challenges before the businesses and setting up of a business enterprise.
CO3:	Aspire with the spirit of entrepreneurship.
CO4:	Discuss recent trends in management.

Course Name: 102-Business Communication Skills

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Discriminate the skills such as linguistic and non-linguistic.
CO2:	Judge an integrative approach where reading, writing, oral and speaking components have been used together to enhance the students' ability to communicate and write effectively.
CO3:	Analyze business letter writing and Media of communication in business.
CO4:	Express the topic very effectively.
CO5:	Produce own meanings of the terms they received on the topics.
CO6:	Show skills in presentation and group activities.
CO7:	Discuss and demonstrate the various terms in vocabulary.
CO8:	Use potential in the individual and group activities.
CO9:	List down the grammatical terms in English.
CO10:	Explain the topic related to listening, speaking, reading and writing topics in communication.

Course Name: 103-Business Accounting

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Reproduce all basic concepts of accounting.
CO2:	Classify the accounts and prepare Journal, Ledger Accounts and Final Accounts.
CO3:	Analyze the profit and Loss Account and Balance Sheet and compare the same of one firm with the other.
CO4:	Appraise the financial position of the business with the help of Balance Sheet.
CO5:	Solve problems on Journal, Ledger, and Cash Book.
CO6:	Define the term Depreciation and solve a problem on Depreciation Account.



**Course Name: 104-Business Economics (Micro)**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Define and reproduce basic micro economic concepts.
CO2:	Relate the economic analysis in the formulation of business policies.
CO3:	Develop economic reasoning to problems of business.
CO4:	Explain the concept of Demand and Supply.
CO5:	Demonstrate types of costs.

**Course Name: 105-Business Mathematics**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Define and memorize basic concepts in business mathematics.
CO2:	Apply mathematical concepts like matrices, transportation, profit and loss etc. in business decisions.
CO3:	Describe the concept and application of Permutations and Combinations in business.

**Course Name: 106-Business Demography and Environmental Studies**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain various concepts in demography like Sex ratio, Literacy, Migration, population density etc.
CO2:	Explain the importance of population for decisions in business.
CO3:	Identify the environmental problems related to business and the remedies or the legal framework.
CO4:	Infer the values of Environmental ethics.
CO5:	Discuss the problems and remedies of urbanization.
CO6:	Rewrite the importance of Literate population.

**Course Name: 201-Principles of Management**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Comprehend regarding nature, complexity and various functions of management.
CO2:	Acquaint with historical perspectives of management.
CO3:	Describe recent trends, international aspects and the theories of management.



**Course Name: 202-Principles of Marketing-This course will enable the learners to:**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Describe basic concepts of marketing, its general nature, scope and importance.
CO2:	Understand the primary functions and applications of marketing principles.
CO3:	Assess basics and essential skills related to marketing.
CO4:	Analyze the opportunities essential in marketing industry.

**Course Name: 203 Principles of Finance**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Discuss the nature, importance, structure of finance related areas.
CO2:	Explain sources of finance for a business.
CO3:	Discuss different concepts like capital structure, dividend, capitalization etc.
CO4:	Debate the different aspects of Financial management
CO5:	Identify the Internal and External sources of finance
CO6:	Summarize the factors affecting capital structure of a business
CO7:	Interpret the term Financial Planning

**Course Name: 204-Basics of Cost Accounting**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Define and understand basic cost concepts and elements of cost.
CO2:	Solve problems on Cost Sheet.
CO3:	Analyze the basic important methods of costing required in business.
CO4:	Solve problems on Cost Sheet.
CO5:	Interpret the concepts Contract Costing, Process Costing and Operating Costing.
CO6:	Solve problems on Contract Costing, Process Costing and Operating Costing.

**Course Name: 205-Business Statistics**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Describe basic concepts of statistics such as concept of population and sample and use of frequency distribution to make decision.
CO2:	Apply basic concepts of statistics such as concept of population and sample in frequency distribution to make decision.
CO3:	Calculate various types of averages and variations.
CO4:	Explain the Correlation and regression analysis





Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO5:	Correlation and regression analysis to estimate the relationship between two variables and its applications.
CO6:	Apply Time Series and Index numbers in business research.

**Course Name: 206-Business Informatics**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Understand the basics of computer.
CO2:	Describe basics of networking.
CO3:	Interpret the basics of internet.
CO4:	Apply the basics of computer, networking, internet, database applications in business.

**Course Name: 301-Personality Development**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Develop the dimensions and importance of an effective personality.
CO2:	Different personality traits, its formation and use in business.
CO3:	Understand various dynamics of personality development.

**Course Name: 302-Business Ethics**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Acquaint with Business Ethics concepts.
CO2:	Promote Ethical Practices in the Business.
CO3:	Develop Ethical and Value Based thought process among themselves.

**Course Name: 303-Human Resource Management and Organization Behavior**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Describe the functions of human resource department.
CO2:	Comprehend human resource processes that are concerned with planning, motivating and developing suitable employees for the benefit of the organization.

**Course Name: 304-Management Accounting**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the concepts in Management Accounting.
CO2:	Interpret and recall the implications of various financial ratios, working capital, budget and budgetary control in decision making.



Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO3:	Apply various techniques of management accounting.
CO4:	Restate the concept of Working Capital.
CO5:	Define the Budget and Budgetary control.

**Course Name: 305-Business Economics (Macro)**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the behavior and working of the economy as a whole.
CO2:	Understand the inter-linkages among the crucial macroeconomic variables.
CO3:	Analyze problems of business and public policy.

**Course Name: 306-I.T. in Management**

Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Describe the role of IT in Management.
CO2:	Discuss the basics of operating systems.
CO3:	Assess the current happenings in IT and its impact on other industries.

**Course Name: 401-Production and Operations Management**

Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the basic concepts like goods, types of goods, production, production process etc. In manufacturing sector.
CO2:	Discuss the emerging manufacturing technologies like CAD, CAM and its role in developing business strategy.
CO3:	Express the concepts like quality control, Six Sigma, ergonomics, industrial safety etc.
CO4:	Recall different types of production processes.

**Course Name: 402-Industrial Relations & Labour Laws**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Differentiate about complexities between labour and management relationships.
CO2:	Understand mechanisms of Industrial Dispute and friendly interventions to deal with employee-employer problems.
CO3:	Acquaint with the knowledge of laws and how law affects the industry & labour.



**Course Name: 403-Business Taxation**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Memorize the basic concepts and definitions under the Income Tax Act, 1961
CO2:	Evaluate latest development in the subject of taxation.
CO3:	Calculate and interpret Income under different heads of Income Tax Act, 1961.
CO4:	Tell the process of submission of Income Tax Return, Advance Tax, Tax deducted at Source, Tax Collection Authorities and different sections.
CO5:	Calculate taxable income of firms, co-operative societies and charitable trust.

**Course Name: 404-International Business**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Understand and assess emerging issues in international business.
CO2:	Evaluate the impact of international business environment on foreign market operations.
CO3:	Express the importance of foreign trade for Indian economy.

**Course Name: 405-Management Information**

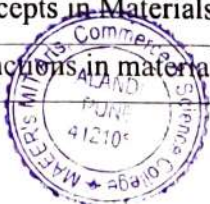
Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Describe the concepts of Information System.
CO2:	Name and state the concepts in system analysis and design.
CO3:	Explain importance of MIS.
CO4:	Assess issues in MIS.

**Course Name: 406-Business Exposure (Field Visits)**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Comprehend the realistic picture of the industry its layout, procedures, processes, organization structure.
CO2:	Acquire the first hand information regarding the functioning of the Industry and its different departments.
CO3:	Prepare report of visits to the companies.
CO4:	Discuss the differences in different business types.

**Course Name: 501-Supply Chain and Logistics Management**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Understand fundamental concepts in Materials and Logistics Management.
CO2:	Explain the issues in core functions in materials and logistics management.



Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO3:	Understand fundamental concepts in Materials and Logistics Management.
CO4:	Find Economic Order Quantity.
CO5:	Define the concepts Gant Charts, PERT, CPM.

**Course Name: 502-Entrepreneurship Development**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Acquire knowledge about the entrepreneurial avenues available.
CO2:	Up bring out their own business plan.
CO3:	Comprehend the creating and managing of new venture.

**Course Name: 503-Business Law**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Understand the basic legal terms and concepts used in law pertaining to business
CO2:	Understand the applicability of legal principles to situations in Business world by referring to few decided leading cases.

**Course Name: 504-Research Methodology ( Tools and Analysis)**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Define various concepts in research methodology.
CO2:	Frame research design.
CO3:	Explain data collection process.
CO4:	Differentiate primary and secondary data, analysis of data, drawing inferences and report writing.
CO5:	Analyze the data collected through various data collection methods, drawing inferences and report writing.
CO6:	Draw inferences based on the survey analysis.
CO7:	Prepare report based upon survey analysis.
CO:8	Refer various material sources such as journals, magazines, papers etc.
CO:9	Write literature based and survey based papers

**Course Name: 505-A Finance Special Paper I - Analysis of Financial Statements**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Define basic concepts used in Financial Statements
CO2:	Analyze and interpret financial statements.



Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO3:	Discuss current financial practices in corporate world.
CO4:	Explain how the finance experts use financial statements to discharge their professional responsibilities.

**Course Name: 505-B - Specialization- I – Sales Management (Marketing - I)**

Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain processes and skills necessary to be successful in personal selling and insights about recent trends in sales management.
CO2:	Apply the tools and techniques necessary to manage the sales function - organization - sales individual effectively.

**Course Name: 505-C - Human Resource Management Special Paper I - Human Resource Management Principles and Functions**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Understand the concepts, principles and practices of H.R.M. and its importance in present era.
CO2:	Explain the concept HR planning.
CO3:	Describe recruitment and selection.
CO4:	Define training, development and evaluation.
CO5:	Explain exit policy.

**Course Name: 506-A- Finance Special Paper II - Long Term Finance**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Express long-term financing, means, rationality etc.
CO2:	Assess the financial structures in companies.
CO3:	Write the use of financial terms in real business life.
CO4:	Solve the cases on cost of capital, leverage and weighted average cost of capital

**Course Name: 506-B Marketing Special Paper II - Retail Management**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Recall and reproduce all functional areas of retailing.
CO2:	Express different perspectives of the Indian retail scenario.
CO3:	Assess the paradigm shifts in retailing business with increasing scope of technology and e-business.



**Course Name: 506C-Human Resource Management Special Paper II - Human Resource Practices**

Sr .No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Describe HRM functions and practices.
CO2:	Express and interpret executive compensation and working conditions and employee welfare.
CO3:	Enumerate HR practices with more exposure to cases.

**Course Name: 601-Business Planning and Project Management**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Plan process in business and can relate the functions and techniques of project management with business.
CO2:	Explain the terms like business forecasting, planning, initial coordination required to set up a new business.
CO3:	Rewrite the project life cycle.
CO4:	Prepare a project report for new business.
CO5:	Define the networking techniques like CPM and PERT.
CO6:	Discuss the challenges for new businesses.

**Course Name: 602-Event Management**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain concepts, issues and various aspects of event management.
CO2:	Plan and execute the event and various aspects pertaining to event management.

**Course Name: 603-Management Control System**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Understand the basic concept and functions of management control and its nature.
CO2:	Get knowledge about how management control is essential and work in functional areas like inventory, production, IT, personnel area and marketing.
CO3:	Describe the business practices and controlling systems.
CO4:	Know about basic concepts of project, various aspects of project, factors affecting on project as well as project planning and control.

**Course Name: 604-E- Commerce**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Understand the concept of electronic commerce.



Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO2:	Discuss the concepts of Cyber Law and Cyber Jurisprudence.
CO3:	Analyze Internet marketing techniques.

**Course Name: 605-A Finance Special Paper III - Financial Services**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the structure of Indian Financial System.
CO2:	Describe the functions of financial markets in India.
CO3:	Assess Role of SEBI as a regulatory authority in the financial system.
CO4:	Discuss the financial services rendered by various professional bodies in India.
CO5:	Examine the role of RBI and IRDA as a regulatory authority.
CO6:	Interpret Recent Trends in Accounting and Finance such as Zero Base Budgeting, Inflation Accounting, Human Resource Accounting, Mergers and Acquisition etc.

**Course Name: 605-B - Marketing Special Paper III - Advertising and Sales Promotion**

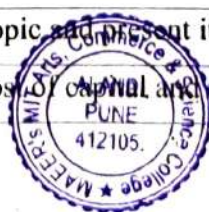
Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Know and understand the importance and functions of advertising.
CO2:	Understand all about various types of decisions in advertising and sales promotion like copy decisions, media decisions etc.
CO3:	Examine with role of information and technology in advertising and sales promotion.
CO4:	Describe key features of Sales Promotion.

**Course Name: 605-C - Human Resource Management Special Paper III - Labor Laws**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Acquaint with important legal provisions governing the industrial employees.
CO2:	Comprehend the legal aspects of HR function of a company.

**Course Name: 606-A - Finance Special Paper IV - Cases in Finance/ Project**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the practical aspects of Finance function with cases.
CO2:	Write an analytical report on finance related topic.
CO3:	Differentiate the complications in finance decision making and skills required to deal with them.
CO4:	Prepare detailed report of a particular topic and present it.
CO5:	Solve the cases on capital budgeting, cost of capital and working capital.

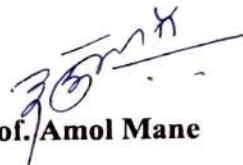


**Course Name: 606-B - Marketing Special Paper IV - Cases in Marketing / Project**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Face the practical problems in marketing with case studies.
CO2:	Complete the project report based on real marketing case study or research.
CO3:	Understand different complications in marketing and skills required to deal with them.

**Course Name: 606-C - Human Resource Management Special Paper IV - Cases in Human Resource Management / Project**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Understand the concepts in case study.
CO2:	Analyze the HR related problems and solve them skilfully with the help of case studies.
CO3:	Understand the nature of the case in HR and skills required to solve the same.
CO4:	Prepare and present a detailed project report on the topic related to HRM.

  
**Prof. Amol Mane**  
**HOD**

  
**Dr. B. B. Waphare**  
**Principal**





**MAEER'S MIT ARTS, COMMERCE AND SCIENCE COLLEGE, ALANDI (D), PUNE**

**Course Outcomes for B.B.A. (International Business) Program for 2013 pattern**

**Course Name: 101-Indian Business Environment**

<b>Sr. No.</b>	<b>Course Outcomes (COs) -This course will enable the learners to:</b>
CO1:	Understand environmental factors affecting businesses.
CO2:	Assess the environmental problems faced by business and commerce.
CO3:	Understand the ethical aspects of business environment.
CO4:	Explain different types of environment.
CO5:	Analyze the problems of growth of economy and give solution on the same.
CO6:	Explain the role of business in maintaining natural resources and sustainable development.
CO7:	Explain the role of Chamber of Commerce in the industrial development in India.

**Course Name: 102-Communication Skills and Personality Development**

<b>Sr. No.</b>	<b>Course Outcomes (COs) -This course will enable the learners to:</b>
CO1:	Understand the concept, process and importance of communication.
CO2:	Illustrate the knowledge of media of communication.
CO3:	Describe on how to develop skills of effective communication -both written and oral.
CO4:	Apply the communication skills in the world of business.
CO5:	Analyze the concept of personality development and its significance in the corporate world.
CO6:	Generalize various traits required for personality development to be an effective executive.

**Course Name: 103-Micro Economic Analysis**

<b>Sr. No.</b>	<b>Course Outcomes (COs) -This course will enable the learners to:</b>
CO1:	Define and describe basic microeconomic concepts of international business.
CO2:	Apply approach to help to draw correct conclusions/ solve economic problems.
CO3:	Explain Law of Demand with example.
CO4:	Explain Law of Supply with example.
CO5:	Describe how to explain and quantify the mechanism by which the total amount of resources possessed by society is allocated among alternative uses.



**Course Name: 104-Business Accounting**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Understand all basic concepts of accounting.
CO2:	Classify the accounts and prepare Journal, Ledger Accounts and Final Accounts.
CO3:	Analyze the profit and Loss Account and Balance Sheet and compare the same of one firm with the other.
CO4:	Appraise the financial position of the business with the help of Balance Sheet.
CO5:	Solve problems on Journal Entries and Ledger Accounts.
CO6:	Solve problems on Subsidiary Books and Cash Book.
CO7:	Solve problems on Final Accounts.

**Course Name: 105-Principles and Practice of Management**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Understand basic concept of organization and business administration.
CO2:	Gain knowledge about working of business organization through the process of management.
CO3:	Understand the basic principles of management - acquainted with management process, functions and principles. Students got the idea about new developments in management.
CO4:	Understand the recent trends in management.
CO5:	Develop managerial skills among them.

**Course Name: 106-Business Mathematics**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the concepts of ratio, proportion and percentage.
CO2:	Describe the concept and application of profit and loss in business.
CO3:	Calculate EMI based upon theoretical concept.
CO4:	Explain the concept of stock exchange and to calculate Dividend.
CO5:	Calculate Dividend.
CO6:	Interpret the applications of matrices in business.

**Course Name: 201-Cost Accounting**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Describe basic concepts in costing, preparation of Cost Sheet etc.
CO2:	Solve problems of Cost Sheet.
CO3:	Explain important methods & techniques of costing used by the industries.
CO4:	Solve problems of Cash Budget and Flexible Budget.



Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO5:	Solve problems of Standard Costing.

**Course Name: 202-Elements of Human Resource Management**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Comprehend the maintenance of better human relations in the organization by the development, application and evaluation of policies, procedures and programs relating to human resources to optimize their contribution towards the realization of organizational objectives.
CO2:	Acquaint with organizational concept to attain its goals effectively and efficiently by providing competent and motivated employees.

**Course Name: 203-Macro Economic Analysis**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain basic concepts of Macro Economics.
CO2:	Describe the relationships among broad aggregates.
CO3:	Apply economic reasoning to macroeconomic policy.

**Course Name: 204-Principles of Marketing**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Understand and critically analyze basic concept of marketing.
CO2:	Understand the need of marketing industry.
CO3:	Explain the functions of Marketing Manager in 21st century.
CO4:	Describe the changing profile and challenges faced by a Marketing manager.
CO5:	Acquire and gain knowledge about the primary functions and applications of marketing principles in actual practice.

**Course Name: 205-Business Statistics**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Understand the concept of population and sample.
CO2:	Apply frequency distribution concept to make decision.
CO3:	Explain various types of averages and variation.
CO4:	Calculate various types of averages and variation.
CO5:	Apply regression analysis to estimate the relationship between two variables.
CO6:	Solve lpp to maximize the profit and to minimize the cost.



**Course Name: 206-Information Technology in Business Operations**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Describe fundamentals of Computers.
CO2:	Explain the usage of computer applications in Business.
CO3:	Explain Block Diagram Of Elements of digital computer.
CO4:	Express the role played by IT in actual business functioning.
CO5:	Classify the types of Memory into Primary memory and Secondary memory.
CO6:	Assess the current happenings in IT sector and its impact on other industries.

**Course Name: 301-International Business Environment**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Comprehend the basic concept of globalization and role played in global environmental issues.
CO2:	Acquaint with eco-friendly policies and practices followed by the corporates.
CO3:	Comprehends with measures taken by the corporate to curb global warming.

**Course Name: 302-Production and Operations Management**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Learn process of production, product design, production planning and control, and also to describe fundamentals of computers
CO2:	Explain about maintenance, method study, work study and motion study, Time study etc.
CO3:	Explain the types of maintenance.
CO4:	Understand the concept of ergonomics and other production related processes and activities.
CO5:	Recall the Procedure of Production Planning.

**Course Name: 303-International Economics**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain international economics concepts.
CO2:	Compare different terms of trade and factors influencing trade.
CO3:	Illustrate international institutions like WTO, IMF, World Bank and their role in international finance and trade.
CO4:	Interpret the theories of international trade.
CO5:	Identify different terms of trade such as Barter Terms of trade & Income Terms of Trade.



**Course Name: 304-International Marketing**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Understand international environment and policies.
CO2:	Demonstrate skills to deal in international market.
CO3:	Memorize the concept of International Marketing.
CO4:	Interpret recent Import Export Policies.
CO5:	List Export Documentation.

**Course Name: 305-Foreign Language Paper I – German**

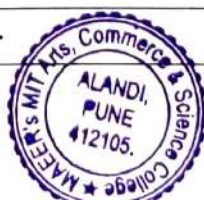
Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Read in German Language.
CO2:	Recall German alphabets.
CO3:	Recall numbers in German language.
CO4:	Write basic sentences in German language.
CO5:	Speak in German Language.

**Course Name: 306-Management Accounting**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Understand the basic knowledge of management accounting.
CO2:	Explain different types of accounting, analysis and interpretation of financial statements and ratios.
CO3:	Solve problems on Ratio Analysis.
CO4:	Solve problems on Funds Flow and Cash Flow Statements.
CO5:	Solve problems on Marginal Costing.
CO6:	Solve problems on Budget and Budgetary Control.
CO7:	Analyze financial statements of the companies.

**Course Name: 401-Foreign Exchange Operations**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Describe concepts like balance of trade, balance of payment, foreign exchange rates etc.
CO2:	Explain practical procedural aspects of banks and other institutions connected with foreign exchange.
CO3:	Discuss Foreign Exchange Market.
CO4:	List Documents used in Foreign Trade.
CO5:	Interpret methods of exchange control.



Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO6:	Differentiate and explain Balance of Trade and Balance of Payments.

**Course Name: 402-International Business in Service Sector**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Comprehend distinctive features, operations of the services in the context of international business.
CO2:	Interpret the role of services in the Indian Economy.
CO3:	Analyze the services having potentials for export.
CO4:	Classify international rules for banking, securities and insurance.
CO5:	Enumerate the problems in International Trade in Services.

**Course Name: 403-International Agricultural Business**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Discuss agricultural scenario at national and international level, agro based industries, basic concepts in agri marketing etc.
CO2:	Quote on exim policy and agri marketing.
CO3:	Plan some business projects on agriculture.
CO4:	Understand the geographical and governmental advantages for agri business.

**Course Name: 404-Business Taxation**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Memorize the basic concepts and definitions under the Income Tax Act, 1961.
CO2:	Evaluate latest development in the subject of taxation.
CO3:	Calculate and interpret income under different heads of Income of Income Tax Act, 1961.
CO4:	Tell the process of submission of Income Tax Return, Advance Tax, Tax deducted at Source, Tax Collection Authorities and different sections.
CO5:	Calculate taxable income of firms, co-operative societies and charitable trust.

**Course Name: 405-Foreign language Paper II – German**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Read in German Language.
CO2:	Recall German alphabets.
CO3:	Recall German numbers up to 100.



Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO4:	Write basic sentences in German language.
CO5:	Speak in German Language.
CO6:	Give their self-introduction in German language.

**Course Name: 406-Business Exposure**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the general nature and structure of business.
CO2:	Enumerate the functioning of various industries.
CO3:	Describe the specific industrial management styles and techniques of execution followed by the industries visited.

**Course Name: 501-Business Ethics**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Comprehend social ethics, corporate ethics and global ethics.
CO2:	Acquaint budding managers' qualities and learned to differentiate the personal and professional ethics on national and international level.
CO3:	Promotes principles of ethics taught the students the functional execution and balance of management system.

**Course Name: 502-Business Law**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Describe basic legal concepts used in law related to businesses.
CO2:	Apply legal principles to situations in business by referring to few decided cases.
CO3:	Define and recall various concepts under Indian Contract Act 1872.
CO4:	Differentiate the functioning of various consumer disputes Redressal agencies.
CO5:	Explain various aspects and applicability of Intellectual Property Rights.

**Course Name: 503-International Relations**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Comprehend the functioning of EU, NAFTA, SAARC and SAPTA.
CO2:	Understand the socio-cultural impact due to uneven income distribution prevailing in Indian society.
CO3:	Explain the role and policies of WTO and allied agencies such as GATS, TRIPS, TRIMS etc.
CO4:	Explain dumping and anti-dumping policies.
CO5:	Enumerate Implications of WTO pertaining to GATS, TRIPS, TRIMS etc.



**Course Name: 504-International Banking and Finance**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Interpret the practices followed by banks at international level.
CO2:	Relate the methods of financing international trade.
CO3:	State the concepts of banking and their functions, role of commercial banking in financing import and export and international debt settlement system.
CO4:	Demonstrate international financial agencies such as World Bank, IMF, ADB etc. In the promotion of international trade.
CO5:	State the role of Commercial Banks in Financing Import & Export.
CO6:	Describe the concepts - Factoring and Forfeiting.

**Course Name: 505-Business Reporting and Analysis**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Learn and analyze, interpret various factors that affect business decision making.
CO2:	Understand different types of reports and reporting pattern followed in different areas of operations in corporate sector
CO3:	Classify different types of business analysis such as Economic Analysis, Company Analysis, and Sector Analysis etc.
CO4:	Demonstrate various tools and techniques used in Business Analysis and Interpretation
CO5:	Preparing Business Plans.

**Course Name: 506-E- Commerce Technology**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Define and explain the concepts e-commerce, internet, intranet, extranet etc.
CO2:	Differentiate between internet, intranet, and extranet.
CO3:	Explain about electronic data exchange and e - governance.
CO4:	Categorise different types of electronic payment system.
CO5:	Explain technical Components of E-Commerce

**Course Name: 601-Import Export Procedure**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain basic concepts of import and export procedure.
CO2:	Explain the procedure of acquiring license for export, import & custom clearance.
CO3:	Describe the documents required in export, import business.
CO4:	Name various schemes implemented by Government to encourage exports and to introduce duty





Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
	drawbacks and remittance scheme.

**Course Name: 602-International Business Law**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain basic concepts in International Business Law.
CO2:	Describe about various international laws and their provisions, international institutions, their functions, role in international economic law.
CO3:	Recognize international institutions and their functions.
CO4:	Analyze the role of international institutions in international economic law.
CO5:	Discuss about international trade and international dispute settlement machinery.
CO6:	Identify Indian laws and various agencies affecting international trade.

**Course Name: 603-Study of Global Economics**

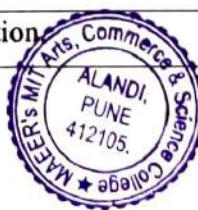
Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the concept globalization, its drivers, global economy of 21st century.
CO2:	Describe the role of IMF, World Bank and global human resource management.
CO3:	Analyze and evaluate the challenges confronted by India in the global economy.
CO4:	Solve case studies of global economics and business environment.

**Course Name: 604-International Project Management**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain basic concepts in International Project Management.
CO2:	Analyze different technical, financial and other aspects of project analysis.
CO4:	Explain Gantt charts and their importance in the project management.
CO5:	Define the concepts in project delivery and control.
CO6:	Describe Cultural Factors Influencing International Projects & Learning.

**Course Name: 605-Supply Chain and Logistic Management**


Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain basic concept of distribution system, channel section, selection of channel partner and strategies of channel of distribution.
CO2:	Describe channel management & channel strategy.
CO3:	State the factors in the selection of distribution channel.
CO4:	Interpret functional areas of logistics integration.



Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO5:	Describe Physical Distribution Management.
CO6:	Define the term Channel Conflict and strategies to overcome the channel conflict.

**Course Name: 606-Research Methodology and Project**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Define various concepts in research methodology.
CO2:	Frame research design.
CO3:	Explain data collection process.
CO4:	Differentiate primary and secondary data, analysis of data, drawing inferences and report writing.
CO5:	Analyze the data collected through various data collection methods, drawing inferences and report writing.
CO6:	Draw inferences based on the survey analysis.
CO7:	Prepare report based upon survey analysis.

  
**Prof. Amol Mane**  
**HOD**

  
**Dr. B. B. Waphare**  
**Principal**



Course Outcomes for B.Com. Program for 2013 pattern

Course Name: (101) Compulsory English

Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO1:	Relate the terms in the poems to their life.
CO2:	Express their own views on the poems they studied.
CO3:	Demonstrate the various characters reflected in the prose.
CO4:	Interpret the various themes reflected in the poems and prose in connection with the literature
CO5:	Convert the idea into expression with the help of the literary pieces studied.
CO6:	Memorize various terms used in the speaking while communicating.
CO7:	Express the topic very effectively.
CO8:	Dramatize a role play on the literary pieces studied.

Course Name: (102) Financial Accounting

Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO1:	Define accounting concept and convention.
CO2:	Finalize the books of Partnership.
CO3:	Know valuation of intangible assets like Goodwill.
CO4:	Calculate lease rent and accounting of lease.
CO5:	Prepare final accounts of charitable trust.
CO6:	Define various software used in accounting.
CO7:	Get in-depth knowledge of accounting in modern day business world.
CO8:	Write the books of accounts proficiently.

Course Name: (103) Business Economics (Micro)

Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO1:	Define Business economics.
CO2:	Distinguish between Micro Economics and Macro Economics.
CO3:	Paraphrase the economic and non-economic goals of a firm.
CO4:	Interpret cost curves.
CO5:	Illustrate the relationship between total cost, average cost and marginal cost.
CO6:	Discuss revenue concept.



Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO7:	Explain different market conditions.
CO8:	Interpret theories of factor pricing.

**Course Name: (104-A) Business Mathematics & Statistics**

Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO1:	Define the concept in Finance and Business Mathematics.
CO2:	Acquaint with various applications of Statistics and mathematics in business.
CO3:	Paraphrase elementary statistical methods for analysis of business data.
CO4:	Apply the concept of matrices and determinants in business and economics.
CO5:	Demonstrate the various measures of central tendency and measure of dispersion.
CO6:	Formulate the graphs to solve business optimization problems.
CO7:	Describe the process of calculation of index numbers.
CO8:	Demonstrate the application of business mathematics in decision making.

**Course Name: (105) Banking & Finance**

Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO1:	Acquaint with the fundamentals of banking.
CO2:	Know banking concepts and operations.
CO3:	Understand banking business and practices.
CO4:	Know banking operations.
CO5:	Understand the new concepts introduced in the banking system.
CO6:	Describe the method of remittances and its uses.
CO7:	Distinguish the different negotiable instruments.
CO8:	Explain the technological advancement in banking industry.

**Course Name: (106) Foundation Course in Commerce**

Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO1:	Explain the various forms of business organizations.
CO2:	Develop conceptual clarity and awareness on latest changes
CO3:	Comprehend various Government Policies
CO4:	Develop Entrepreneurial spirit among them.
CO5:	Demonstrate the practical part of online Baking.



Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO6:	Enumerate the emerging trends in commerce.
CO7:	Paraphrase the stock market in India.
CO8:	Evaluate the different mutual funds schemes.

**Course Name: (107)Additional English**

Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO1:	Realize the beauty and communicative power of English language.
CO2:	Interpret various themes and values covered in literary pieces
CO3:	Explain a good blend of old and new literary extracts.
CO4:	Identify the major problems in human life in modern world.
CO5:	Develop communicative ability.
CO6:	Develop literary sensibilities.
CO7:	Summarize each prose lesson and poetry.
CO8:	Classify the theme, characters and language used in the literary extracts.

**Course Name: (201)Business Communication**

Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO1:	Define the term business communication.
CO2:	List the methods and channels used in business communication.
CO3:	Explain the soft-skills required for effective business communication.
CO4:	Classify different forms formal written business communication.
CO5:	Recall the principles of effective business communication.
CO6:	Explain the barriers to effective business communication.
CO7:	Relate the social media and its use for business communication.
CO8:	Dramatize the role play activity.

**Course Name: (202)Corporate Accounting**

Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO1:	Define accounting concept and convention and accounting standards.
CO2:	Finalize the books of company.
CO3:	Prepare liquidator final statement of account.
CO4:	Define various software used in accounting.



Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO5:	Prepare Amalgamation of business and prepare consolidated financial statements.
CO6:	Paraphrase the process of internal reconstruction.
CO7:	Practice the valuation of share under different methods.
CO8:	Get in-depth knowledge of accounting in modern day business world.

**Course Name: (203)Business Economics (MACRO)**

Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO1:	Define Macro economics.
CO2:	Distinguish between Micro Economics and Macro Economics.
CO3:	Discuss national income.
CO4:	Explain different functions of money.
CO5:	Interpret the concept of value of money.
CO6:	Distinguish theories of income and employment.
CO7:	Interpret the importance of taxation policy.
CO8:	Explain the role of monetary and fiscal policies in the economy.

**Course Name: (204) Business Management**

Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO1:	Explain the management evolution and how it will affect future managers.
CO2:	Differentiate and evaluate the influence of historical forces on the current practice of management.
CO3:	Identify and evaluate social responsibility and ethical issues involved in business situations and logically articulate own position on such issues.
CO4:	Explain how organizations adapt to an uncertain environment and identify techniques that managers use to influence and control the internal environment.
CO5:	Practice the process of management's four functions: planning, organizing, leading, and controlling.
CO6:	Identify and apply vocabularies within the field of management to articulate one's own position on a specific management issue and communicate effectively with varied audiences.
CO7:	Criticize the various leadership styles to anticipate the consequences of each leadership style.
CO8:	Discriminate qualitative and quantitative information to isolate issues and formulate best control methods.



**Course Name: (205) Elements of Company Law**

Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO1:	Enumerates the introduction to the New Companies Act 2013 & Concept of Companies.
CO2:	Comprehend and demonstrate the formation and Incorporation of a Company
CO3:	Construct and draft the documents relating to Incorporation and Raising of Capital.
CO4:	Perceive Various Modes for Raising of Share Capital.
CO5:	Explain the Rules of Forfeiture, Surrender and Transfer of Shares.
CO6:	Describe the advantage of E-Governance and E-Filing.
CO7:	Recognize the role of Key Managerial Personnel.
CO8:	Distinguish between Revival and Re-habilitation of Sick Companies and understand the concept of Compromises, Arrangements and Amalgamation.

**Course Name: (206) Special Paper-I Banking & Finance**

Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO1:	Acquaint the fundamentals of banking in India.
CO2:	Develop the capability to know banking concepts and operations of various types of Banks.
CO3:	Recognize the role of private banking business and practices.
CO4:	Describes the banking operations of State Bank of India.
CO5:	Classify the functioning of Regional Rural Banks and NABARD.
CO6:	Comprehend the Cooperative Credit System.
CO7:	Illustrate the Functions of the RBI
CO8:	Appraise the Banking Sector Reforms.

**Course Name: (206) Special Paper I Cost & Works Accounting**

Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO1:	Define basic cost concept.
CO2:	Differentiate the various elements of cost and its types.
CO3:	Explain the ascertainment of material cost.
CO4:	Evaluate the methods of costing.
CO5:	Memorize the concept inventory control techniques.
CO6:	Explain importance of costing techniques in the business world.
CO7:	Demonstrate and experiment the accounting of labor cost.
CO8:	Interpret the methods of labour remuneration.



**Course Name: Environmental Studies**

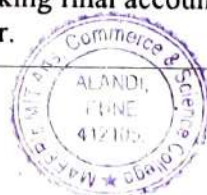
Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO1:	Recognize the importance of Environmental Studies.
CO2:	Develop sensitivity among themselves towards current environmental issues.
CO3:	Appreciate the ethical, cross-cultural, and historical context of environmental issues and the links between human and natural systems.
CO4:	Apply systems concepts and methodologies to analyze and understand interactions between social and environmental processes.
CO5:	Reflect critically about their roles and identities as citizens, consumers and environmental actors in a complex, interconnected world.
CO6:	Demonstrate proficiency in quantitative methods, qualitative analysis, critical thinking, and written and oral communication needed to conduct high-level work as interdisciplinary scholars and/or practitioners.
CO7:	Get practical experience while completing projects on the selected topic in Environmental Studies.
CO8:	Formulate the environment friendly approach towards society.

**Course Name: (301) Business Regulatory Framework**

Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO1:	Demonstrate the practical exhibition and explains the essentials of contract.
CO2:	Describe standard and legal terminology of partnership.
CO3:	Apply Mercantile Law with respect to Sale of Goods.
CO4:	Paraphrase Legal and technical issues involved in E-Contracts.
CO5:	Interpret the protection of the interest of the consumer and settlement of consumer disputes.
CO6:	Define statutory protection for inventions and constitutional basis for IP protection.
CO7:	Demonstrate and understand the Negotiable Instrument Act.
CO8:	Identify the removal of judicial intervention.

**Course Name: (302) Advanced Accounting**

Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO1:	Define accounting standards and International financial reporting standards.
CO2:	Finalize the books of banking final accounts as per banking regulation act 1949.
CO3:	Prepare accounts of insurance claim.
CO4:	Finalize the books of Co-operative banking final accounts as per State co-operative societies act 1961 amended year to year.





Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO5:	Define various software used in accounting.
CO6:	Prepare branch account of business.
CO7:	Define the process of single entry system.
CO8:	Get in-depth knowledge of accounting in modern day business world.

**Course Name: (303-B) International Economics**

Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO1:	Define International economics.
CO2:	Distinguish between Domestic trade and international trade.
CO3:	Interpret theories of international trade.
CO4:	Understand the concept of balance of payment.
CO5:	Explain regional organizations.
CO6:	Discuss the concept of foreign exchange rate.
CO7:	Express the role of mncs.
CO8:	Explain India's foreign trade policy.

**Course Name: (304) Auditing & Taxation**

Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO1:	Discuss understanding of ethics and social responsibility.
CO2:	Apply Critical Thinking Skills by solving problems requiring quantitative and/or qualitative analysis.
CO3:	Demonstrate the accounting knowledge and skills in Auditing.
CO4:	Define the concept, skills and abilities of auditing process.
CO5:	Describe how the provisions in the corporate tax laws can be used for tax planning.
CO6:	Explain different types of income group and their tax slabs.
CO7:	Learn various direct and indirect taxes and their application in business world.
CO8:	Describe the use of various deductions to reduce the taxable income.

**Course Name: (305 & 306) Cost & Works Accounting- Special Paper-II & III**

Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO1:	Define the concept and principles of application of overheads.
CO2:	Explain various methods of costing and their application.
CO3:	Define costing techniques used in business.



Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO4:	Enumerate the legal procedure for cost audit and its requirement.
CO5:	Apply the Costing methods and techniques for business decision making..
CO6:	Experiment the various costing techniques.
CO7:	Estimate the budget of business.
CO8:	Estimate the profit of business with the help of marginal costing.

**Course Name: (305 & 306) Banking and Finance- Special Paper-II & III**

Sr. No.	Course Outcomes (COs) -This Course will enable the learners to:
CO1:	Describe the risks faced by banks and ways to overcome them.
CO2:	Enumerate the difference between Collecting banker and Paying Banker.
CO3:	Evaluate the different life insurance policies based on their needs.
CO4:	Comprehend various negotiable instruments.
CO5:	Acquaint with Banking Law and Practice in relation to the Banking system in India.
CO6:	Paraphrase the legal aspects of Banking transactions and its implications as Banker and Customer.
CO7:	Demonstrate the Banking Law and Practice in India. .
CO8:	Summarize the functions of stock exchanges in India.

  
**Prof. Manasi Atitkar**

**HOD**



  
**Dr. B. B. Waphare**  
**Principal**

Course Outcomes for B.A. Program for 2013 pattern

Course Name: 1017 - Compulsory English

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Identify human values.
CO2:	Develop integrated view about language and literature.
CO3:	Integrate linguistic competence and communicative competence.
CO4:	Appraise native culture experiences and situations.
CO5:	Recall language components.
CO6:	Describe causes of farmer's suicide.
CO7:	Explain different forms of poetry.
CO8:	Inculcate interest in reading literary pieces.

Course Name: 1157- Economics General 1 Indian Economy – Problems and prospects

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Recall the meaning of developing economy.
CO2:	Distinguish between Developed economy and Developing economy.
CO3:	Define Poverty.
CO4:	Examine poverty line.
CO5:	Interpret theory of Demographic transition.
CO6:	Describe causes of farmer's suicide.
CO7:	Discuss new economic reforms.
CO8:	Classify labor category.

Course Name: 1337 Optional English - English Literature & Language

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Identify human values.
CO2:	Develop integrated view about language and literature.
CO3:	Formulate linguistic competence and communicative competence.
CO4:	Explain native culture experiences and situations.
CO5:	Recall language components.
CO6:	Summarize the theme of the prose and poetry.
CO7:	Appreciate literature on their own and is prepared for further learning in literature and criticism.



CO8:	Plan the further reading in literature and criticism.
------	---

**Course Name: 1167 Politics General I Indian Government & Politics**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Define the concepts, ideas and theories in politics.
CO2:	Examine the evolution and usage of politics.
CO3:	Apply political theories with current scenarios.
CO4:	Comprehend the political thoughts and principles.
CO5:	Recognize the importance of various concepts in politics in real life.
CO6:	Identify reflection of concepts they study in the real life political scenario.
CO7:	Analyze political and policy problems and formulate policy options.
CO8:	Demonstrate critical thinking, including the ability to form an argument, detect fallacies, and martial evidence, about key issues of public policy and politics.

**Course Name: 1207 Geography General 1 - Elements Of Geomorphology**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Define Geomorphology.
CO2:	Comprehend fundamental concepts of the earth.
CO3:	Conceptualize origin of Continents and Ocean basin.
CO4:	Elaborate type of rocks.
CO5:	Define internal movements and classify the movements.
CO6:	Understand with comparing mechanical, Chemical, biological and anthropogenic weathering.
CO7:	Understand the process of landforms created rivers and sea-waves.
CO8:	Know the concept and types of mass wasting and slope.
CO9:	Apply received knowledge of Geomorphology in various geographical conditions.

**Course Name: 1227 Psychology General I**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Learn psychology as science through various perspective and Career avenues in Psychology.
CO2:	Know biological bases of human behavior.
CO3:	Define and explain the sensation, attention and perception.
CO4:	Apply conflict resolution techniques in his life.
CO5:	Comprehend the theories of emotion and familiarize with EQ measurement.



CO6:	Define memory and its improvement techniques.
CO7:	Evaluate theories, traits and assessment techniques of personality.
CO8:	Define and elaborate intelligence and thinking.

## Second Year BA

### Course Name: 2017- Compulsory English

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Identify human values.
CO2:	Develop integrated view about language and literature.
CO3:	Modify linguistic competence and communicative competence.
CO4:	Distinguish native culture experiences and situations.
CO5:	Recall language components.
CO6:	Summarize the theme of the prose and poetry.
CO7:	Explain different forms of poetry.
CO8:	Develop interest in reading literary pieces.

### Course Name: 2337- English General -II Study of English Language and Literature

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Formulate interest in linguistics and literature.
CO2:	Recall the elements of short story.
CO3:	Analyze short stories.
CO4:	Explain the sounds in English language.
CO5:	Produce list of morphemes and its types.
CO6:	Illustrate varieties of English language.
CO7:	Define short story as genre of literature.
CO8:	Relate the technical aspects of language and their practical usage.

### Course Name: 2338- English Special Paper-I Appreciating Drama

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Select the right expression or right Set of words in their writing skills
CO2:	Choose right words to write the answer of literature effectively
CO3:	Predict the Climax of the story and understood the topic
CO4:	Produce their own expression while writing on the topic they studied
CO5:	Play a role on the topic of literature they studied



CO6:	Plan and rewrite in their own words which they understood from the topic of literature
CO7:	Construct their own idea of basic thought process of the prose they studied from literature
CO8:	Appraise the literary concept very enthusiastically

**Course Name: 2339 English Special Paper-II Appreciating Poetry**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Familiarize with the masterpieces in English poetry by eminent poets like William Wordsworth, Edmund Spenser, William Shakespeare, John Donne, Robert Browning, A.L. Tennyson and others.
CO2:	Get acquainted with the terminology in poetry criticism.
CO3:	Recognize various poetic devices used in English poetry viz. imagery, symbolism and various figures of speech.
CO4:	Comprehend basic metrical patterns in English poetry.
CO5:	Distinguish various forms of English poetry viz. sonnet, ballad, epic, ode, dramatic monologue etc.
CO6:	Recognize with the periods and movements in the history of English poetry.
CO7:	Demonstrate the difference in style of English poetry written in various periods.
CO8:	Appreciate peculiar characteristics of various periods and movements in English poetry viz. Elizabethan, Metaphysical, Neoclassical, Romantic, Victorian and Modern by reading select masterpieces from the said periods.

**Course Name: 2157 Economics- General II Modern Banking**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Define Banking.
CO2:	Understand evolution of banking.
CO3:	Interpret instruments of banking.
CO4:	Illustrate methods of remittances.
CO5:	Produce the account opening process.
CO6:	Discuss functions of Commercial bank.
CO7:	Recognize procedure of multiple credit creation.
CO8:	Compare between Closure of account and Transfer of account.



**Course Name: 2158 Economics – Special Paper I Micro Economics**

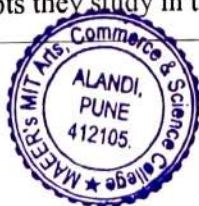
<b>Sr. No.</b>	<b>Course Outcomes (COs) -This course will enable the learners to:</b>
CO1:	Define Micro economics.
CO2:	Distinguish between Micro Economics and Macro Economics.
CO3:	Comprehend economic and non-economic goals of a firm.
CO4:	Interpret cost curves.
CO5:	Enumerate the relationship between total cost, average cost and marginal cost.
CO6:	Discuss revenue concept.
CO7:	Explain different market conditions.
CO8:	Compare between perfect and imperfect competition.

**Course Name: 2159- Economics– Special Paper II Macro Economics**

<b>Sr. No.</b>	<b>Course Outcomes (COs) -This course will enable the learners to:</b>
CO1:	Define Micro economics.
CO2:	Distinguish between Micro Economics and Macro Economics.
CO3:	Discuss national income.
CO4:	Explain different functions of money.
CO5:	Recall the concept of value of money.
CO6:	Interpret theories of income and employment.
CO7:	Enumerate the importance of taxation policy.
CO8:	Reproduce the role of monetary and fiscal policies in the economy.

**Course Name: 2167 General Paper II: Political Theory& Concepts**

<b>Sr. No.</b>	<b>Course Outcomes (COs) -This course will enable the learners to:</b>
CO1:	Define the concept, ideas and theories in politics.
CO2:	Explain the evolution and usage of politics.
CO3:	Apply political theories with current scenarios.
CO4:	Comprehend the political thoughts and principles.
CO5:	Recognize the importance of various concepts in politics in real life.
CO6:	Identify reflection of concepts they study in the real life political scenario.



CO7:	Analyze political and policy problems and formulate policy options.
CO8:	Demonstrate critical thinking, including the ability to form an argument, detect fallacies, and marshal evidence, about key issues of public policy and politics.

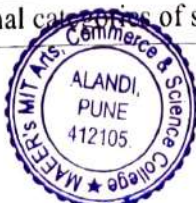
**Course Name: 2777- Environmental Studies**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Become aware about the importance of Environmental Studies.
CO2:	Develop sensitivity among themselves towards current environmental issues.
CO3:	Appreciate the ethical, cross-cultural, and historical context of environmental issues and the links between human and natural systems.
CO4:	Apply systems concepts and methodologies to analyze and understand interactions between social and environmental processes.
CO5:	Reflect critically about their roles and identities as citizens, consumers and environmental actors in a complex, interconnected world.
CO6:	Demonstrate proficiency in quantitative methods, qualitative analysis, critical thinking, and written and oral communication needed to conduct high-level work as interdisciplinary scholars and/or practitioners.
CO7:	Get practical experience while completing projects on the selected topic in Environmental Studies.
CO8:	Address ecology and environment related issues in their area.

**Third Year BA**

**Course Name: 3017- Compulsory English**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Recognize the best use of language in literature through reading of select literary pieces.
CO2:	Realize the communicative power of English.
CO3:	Demonstrate the ability to appreciate literary pieces.
CO4:	Get exposure of varied culture through literature.
CO5:	Comprehend the various types of communication viz. verbal, non-verbal, oral and written.
CO6:	Demonstrate communicative English fluently.
CO7:	Make public presentation effectively.
CO8:	Acquaint with the functional categories of sentence viz. declaratives, imperatives,





	interrogatives and exclamations.
CO9:	Acquire various soft skills in order to achieve overall personality development.

**Course Name: 3337- English General III Advanced Study of English Language and Literature**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Get a very good exposure of Indian English poetry.
CO2:	Recognize creative use of language in Indian English poetry.
CO3:	Enumerate the way in which Indian English poetry expresses its ethos and culture.
CO4:	Demonstrate their understanding of semantics.
CO5:	Identify elements of English sentence.
CO6:	Comprehend all the structural and functional categories of English sentence.
CO7:	Recall elocutionary, illocutionary and locutionary acts.
CO8:	Apply knowledge of concepts in semantics and pragmatics in their daily lives.

**Course Name: 3338- English Special Paper III Appreciating Novel**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain basics of novel.
CO2:	Relate historical development and nature of novel.
CO3:	Interpret cultural diversity.
CO4:	Examine elements of novel.
CO5:	Define types of novel.
CO6:	Analyze novel.
CO7:	Summarize novel.
CO8:	Develop interest in reading novels.

**Course Name: 3339- English Special Paper IV Introduction to Literary Criticism**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Tell basics of literary criticism.
CO2:	Explain nature of literary criticism.
CO3:	Classify historical development of literary criticism.
CO4:	List different approaches to literary criticism.



CO5:	Develop aptitude for critical analysis.
CO6:	Define critical terms.
CO7:	Demonstrate interest in literary criticism.
CO8:	Take part in critical analysis of literary pieces.

**Course Name: 3157- Economics General Paper III Economic Development & Planning**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Distinguish Economic Development and Economic Growth
CO2:	Comprehend the Concept of Developed, Developing Countries
CO3:	Perceive Constraints on Development Process
CO4:	Recall the Theories of Economic Development
CO5:	Recognize the Approaches to Economic Development
CO6:	Construct the Role of Foreign Capital in Economic Development
CO7:	Apply Macro Economic Policy in economic fluctuations
CO8:	Enumerate the need of Economic Planning

**Course Name: 3158- Economics Special Paper III International Economics**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Define International economics.
CO2:	Distinguish between Domestic trade and international trade.
CO3:	Interpret theories of international trade.
CO4:	Recall the concept of balance of payment.
CO5:	Explain regional organizations.
CO6:	Discuss the concept of foreign exchange rate.
CO7:	Enumerate the role of MNCs.
CO8:	Explain India's foreign trade policy.

**Course Name: 3159 Economics Special Paper IV Public Finance**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Define public finance.



CO2:	Classify public expenditure.
CO3:	Interpret the concepts related to public finance.
CO4:	Recall the concept of public debt.
CO5:	Explain budget.
CO6:	Discuss the effects of Deficit Financing.
CO7:	Enumerate Centre-State Financial Relationship.
CO8:	Explain Fiscal Policy.

**Course Name: 3167- Political Science Political Ideology**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Recognize the role of different political ideologies and their impact in politics.
CO2:	Evaluate ideology is critically studied in its historical context.
CO3:	Differentiate streams and subtle nuances within each political ideology.
CO4:	Recall introductory course in Public Administration; The essence of Public Administration.
CO5:	Define the administrative salience and capabilities to deal with the process of change
CO6:	Comprehend and follow changes in patterns of political behavior, ideas and structures.
CO7:	Demonstrate reflection of political and leadership theories in real life situations.
CO8:	Enumerate the salient features of our democracy and its functioning through the constitution

  
Prof. Mansi Atitkar

**HOD**

  
Dr. B. B. Waphare

**Principal**



**MAEER'S MIT ARTS, COMMERCE AND SCIENCE COLLEGE, ALANDI (D), PUNE**

**Course Outcomes for M.Sc. (Computer Science) Program for 2013 pattern**

**Semester I - 2019 Pattern Course Name: Paradigm of Programming Language**

Sr.No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Think about programming languages analytically.
CO2:	Separate syntax from semantics.
CO3:	Compare programming language designs.
CO4:	Interpret their strengths and weaknesses.
CO5:	Learn new languages more quickly.
CO6:	Infer basic language implementation techniques.
CO7:	Learn small programs in different programming Languages.

**Course Name: Design and Analysis of Algorithms**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Design the algorithms.
CO2:	Select the appropriate algorithm by doing necessary analysis of algorithms.
CO3:	Learn basic Algorithm Analysis techniques and identify the use of asymptotic notation.
CO4:	Interpret the use of data structures in improving algorithm Performance.
CO5:	Differentiate classical problem and solutions.
CO6:	Identify classification of problems.
CO7:	Provide foundation in algorithm design and analysis.
CO8:	Describe and design algorithms in the context of space and time complexity.

**Course Name: Database Technologies**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Summarize database technologies.
CO2:	Describe the concept of NoSQL databases.
CO3:	Design database using MongoDB.
CO4:	Implement the information of making a choice of what database technologies to use, based on their application needs.
CO5:	Handle large volumes of structured, semi-structured, and unstructured data using database technologies.
CO6:	Identify detailed architecture, define objects, load data, query data and performance tune NoSQL databases.



**Course Name: Cloud computing**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the principles and paradigm of Cloud Computing.
CO2:	Appreciate the role of Virtualization Technologies.
CO3:	Design and deploy Cloud Infrastructure.
CO4:	Predict cloud security issues and solutions.
CO5:	Design& develop backup strategies for cloud data based on features.
CO6:	Display new ideas and innovations in cloud computing.

**2013 Pattern Course Name: CS-101 Principles of Programming Languages**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Think about programming languages analytically.
CO2:	Separate syntax from semantics.
CO3:	Compare programming language designs.
CO4:	Identify their strengths and weaknesses.
CO5:	Learn new languages more quickly.
CO6:	Interpret basic language implementation techniques.
CO7:	Learn small programs in different programming Languages.

**Course Name: CS-102 Advanced Networking**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Define different types of routing protocols.
CO2:	Illustrate different types of multimedia.
CO3:	Recall the concept of networking models, protocols, functionality of each layer.
CO4:	Explain methods of user authentication.
CO5:	Explain the importance of network security and cryptography and its applications.
CO6:	Identify different network security protocols and learn them.

**Course Name: CS-103 Distributed Database Concepts**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Relate the concepts of distributed database.
CO2:	Describe what is Distributed DBMS.
CO3:	Explain various architectures of DDBMS.



Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO4:	Apply various fragmentation techniques given a problem. Demonstrate the basic fundamentals of distributed database.
CO5:	Illustrate information of architecture, design issues, integrity control, query processing and optimization, transactions, and concurrency control & distributed transaction reliability.
CO6:	Identify the steps of query processing.

**Course Name: CS-104 Design and Analysis of Algorithms**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Know the basic Algorithm Analysis techniques and express the use of asymptotic notation.
CO2:	Discuss different design strategies.
CO3:	Express the use of data structures in improving algorithm performance.
CO4:	Explain classical problems and solutions.
CO5:	Learn a variety of useful algorithms.
CO6:	Identify classification of problems.

**Course Name: CS-105 Network Programming**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Demonstrate the working mechanism and implementation of data communication protocols on Unix operating system.
CO2:	Do the implementation using TCP sockets
CO3:	Do the implementation using UDP sockets.
CO4:	Construct Client-Server application program.
CO5:	Construct Client-Server application program.
CO6:	Show the use of different socket options.
CO7:	Plan to create different kinds of projects which can make use of TCP and UDP client server technology.

**Semester II - 2013 Pattern Course Name: CS-201 Digital Image Processing**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Learn the applications of Digital Image Processing, how images are formed, sampled, quantized and represented digital.
CO2:	Learn how images are enhanced using Spatial Filtering.
CO3:	Learn how images are enhanced using Frequency Filtering.



Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO4:	Learn how images are restored using different filters.
CO5:	Learn the role of Morphological Operations in Image Processing.
CO6:	Learn the segmentation and how it can be achieved using different methods.
CO7:	Learn how an object can be described. (Feature Extraction methods)

**Course Name: CS-202 Advanced Operating Systems**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Describe the programming interface to the Unix/Linux-system call.
CO2:	Demonstrate C program that runs under Unix/Linux.
CO3:	Define the insights into functional modules for OS.
CO4:	Summarize the concepts underlying in the design and implementation of OS.
CO5:	Summarize the concept of system call implementation.
CO6:	Design and do implementation of Operating Systems.

**Course Name: CS-203 Data Mining and Data Warehousing**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Process raw data to make it suitable for various data mining algorithms.
CO2:	Discover and measure interesting patterns from different kinds of databases.
CO3:	Interpret the techniques of clustering, classification, association finding, feature selection and visualization to real world data.
CO4:	Design a data mart or data warehouse for any organization.
CO5:	Asses raw input data and pre-process it to provide suitable input for range of data mining algorithms.
CO6:	Extract association rules and classification model.
CO7:	Identify the similar objects using clustering techniques.

**Course Name: CS-205 Programming with DOT NET**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Gain information of DOT Net framework.
CO2:	Learn C# language features for development of Web and Stand Alone Application.
CO3:	Do the implementation of Web Services using DOTNET framework.
CO4:	Apply validations to ASP and C# pages.
CO5:	Use different controls of c# and ASP.Net



Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO6:	Develop different kinds of web application.
CO7:	Host different kinds of web application on the internet.

**Course Name: CS-206 Artificial Intelligence-This course will enable the learners to:**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Define what is AI and Early work in AI, AI and related fields and AI problems and Techniques.
CO2:	Solve AI problems.
CO3:	Express the Representations and Mappings, Approaches to Knowledge representation, Knowledge representation method- Propositional Logic,, Predicate logic, Representing Simple facts in Logic, Representing Instances and Isa relationships,- Computable Functions and Predicates, Resolution, Forward and backward chaining.
CO4:	Write a Script and design a frame for given problem.
CO5:	Estimate Minimax Search Procedures, Adding alpha-beta cut-offs.
CO6:	Get the information about what is learning and types of learning.

**SY MSc(CS) Semester III - 2014 Pattern Course Name: CS-301 Software Metrics & Project Management**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Demonstrate the skill to ensure successful medium and large scale projects.
CO2:	Relate requirement elicitation, project management, verification and validation of software engineering projects with real life projects
CO3:	Select and use project management techniques for process modelling, planning, estimation, risk management, process and product metrics for successful quality project.
CO4:	Apply project management concepts and techniques to an IT project.
CO5:	Identify issues that could lead to IT project success or failure.
CO6:	Explain project management in terms of the software development process.
CO7:	Describe the responsibilities of IT project managers.
CO8:	Apply project management concepts through working in a group as team leader or active team member on an IT project.

**Course Name: CS-302 Mobile Computing**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the concepts of android.
CO2:	Explain the principles and theories of mobile computing technologies.





Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO3:	Describe infrastructures and technologies of mobile computing technologies.
CO4:	List applications in different domains that mobile computing offers to the public, employees, and businesses.
CO5:	Describe the possible future of mobile computing technologies and applications.
CO6:	Communicate effectively course work through written and oral presentation.

**Course Name: CS-303 Soft Computing**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the concepts of how an intelligent system work and its brief development process.
CO2:	Solve fuzzy set problems by recognizing fuzzy rules, approximate reasoning, fuzzy inference systems, and fuzzy logic.
CO3:	Explain the theory and concepts of neural networks.
CO4:	Use Soft computing techniques to solve character recognition, pattern classification, regression and similar problems.
CO5:	List the facts and outline the different process carried out in fuzzy logic, ANN and Genetic Algorithms.
CO6:	Outline facts to optimization, identify process/procedures to handle real world problems using soft computing.

**Course Name: CS-304 Core Project**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Identify, define and justify the scope of the proposed problem.
CO2:	Gather and analyze system requirements.
CO3:	Propose an optimized solution among the existing solutions.
CO4:	Practice software analysis and design techniques.
CO5:	Develop an application based function on the software design.
CO6:	Apply coding, debugging and testing tools to enhance the quality of the software.
CO7:	Construct new software system based on the theory and practice gained through this exercise.
CO8:	Prepare the proper documentation of software projects following the standard guidelines.
CO9:	Learn technical report and oral presentation skills.




**Course Name: CS-307 Functional Programming**


Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Discuss the basics of lambda calculus and corabinator, how they are used to implement functional programming languages.
CO2:	Summarise the main features of reduction strategies.
CO3:	Solve problem by using Python Programming.
CO4:	Do programming capabilities using Python Programming.
CO5:	Construct and reduce code using functional features of Python Programming.
CO6:	Construct Object Oriented Programming features using Python Programming.

**Course Name: CS-308 Business Intelligence**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the role of BI in enterprise performance management and decision support.
CO2:	Describe the applications of data mining and intelligent systems in managerial work.
CO3:	Distinguish between data warehousing and online analytical processing (OLAP) concepts, including dimensional modelling, star and snowflake schemas, attribute hierarchies, metrics, and cubes.
CO4:	Reframe data analysis and reporting using available BI software.
CO5:	Explain the foundations, definitions, and capabilities of DSS, data analytics and BI.
CO6:	List the definitions, concepts, and architectures of data warehousing.
CO7:	Demonstrate the impact of business reporting, information visualization, and dashboards.
CO8:	Explain data mining, neural networks, support vector machines, text analytics, text mining, sentiment analysis, web mining, web analytics, social analytics, social network analysis.

  
**Prof. Rashmi Lad**  
**HOD**



  
**Dr. B. B. Waphare**  
**Principal**

**MAEER'S MIT ARTS, COMMERCE AND SCIENCE COLLEGE, ALANDI (D), PUNE**

**Course Outcomes for M.C.A. Program for 2013 pattern**

**Course Name : CAC-101- Fundamentals of Information Technology**

<b>Sr. No.</b>	<b>Course Outcomes (COs) -This course will enable the learners to:</b>
CO1:	Explain system basic concepts and its application of Computer.
CO2:	Explain concept of hardware, software and input and output devices.
CO3:	Describe working of computer and memory concept.
CO4:	Compare various types of Operating system.
CO5:	Solve the binary, decimal and octal arithmetic.
CO6:	Explain the concepts of networking, topologies etc.
CO7:	Describe the software development process.

**Course Name : CAC-102- Programming in C**

<b>Sr. No.</b>	<b>Course Outcomes (COs) -This course will enable the learners to:</b>
CO1:	Explain Logical & Programming concepts.
CO2:	Apply Problem Solving Techniques while writing programs.
CO3:	Write Programs in C Language.
CO4:	Describe and handle data structures based on problem subject area.
CO5:	Identify textual information, characters and strings in programs.
CO6:	Work with arrays of compound objects.
CO7:	Implement a concept of object thinking within the framework of functional model.
CO8:	Implement a concept of functional hierarchical code organization.

**Course Name : CAC-103- Elements of Statistics**

<b>Sr. No.</b>	<b>Course Outcomes (COs) -This course will enable the learners to:</b>
CO1:	Explain the power of excel spreadsheet in computing summary statistics.
CO2:	Discuss the concept of various measures of central tendency and variation and their importance in business.
CO3:	Solve the concept of probability, distributions and simulation in business world.
CO4:	Solve the concept of the concept of Curves like obgive.



CO5:	Classify the histogram and graphs.
CO6:	Discuss the business profit and loss using graphs.
CO7:	Compare the model sampling form for binomial distributions.

**Course Name : CAC-104 - Financial Accounting**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Use knowledge in setting up a computerized set of accounting books.
CO2:	Explain progressive affective domain development of values, the role of accounting in society and business.
CO3:	Explain relevant financial accounting career skills
CO4:	Use both quantitative and qualitative knowledge to their future careers in business.
CO5:	Describe relevant managerial accounting career skills, applying both quantitative and qualitative knowledge to their future careers in business.
CO6:	Apply thorough systematic and subject skills within various disciplines of commerce, business, accounting, economics, and finance, auditing and marketing.
CO7:	Identify features and roles of businesspersons, entrepreneur, managers, consultant, which will help learners to possess knowledge and other soft skills and to react aptly when confronted with critical decision-making.
CO8:	Show proficiency with the ability to engage in competitive exams like CA, CS, ICWA and other courses.

**Course Name : CAC-105 - Principles of Management**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain working of business organization through the process management.
CO2:	Describe the concept of management process, functions and principles.
CO3:	Explain with recent trends in management.
CO4:	Explain basic concept of organization and business administration.
CO5:	Compare the basic principles of management - acquainted with management process, functions and principles. Students got the idea about new developments in management.
CO6:	Develop managerial skills among them.
CO7:	Explain basic concept of business administration and communication ways.



**Course Name : CAC-106 - Business Communication**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the concept of Communication and importance of communication.
CO2:	Memories various terms used in the speaking while communicating.
CO3:	Express the topic very effectively.
CO4:	Produce their own meanings of the terms they received on the topics.
CO5:	Show their skills in presentation and group activities.
CO6:	Discuss and demonstrate the various terms in vocabulary.
CO7:	Use their potential in the individual and group activities.
CO8:	List down the grammatical terms in English.

**Course Name : CAC-107 – Lab on CAC-101 and CAC -102**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Apply the knowledge of DOS Commands and basic of OS practically.
CO2:	Use the C Programming Concepts Practically for problem solving.
CO3:	Demonstrate his theoretical knowledge practically in Computer Laboratory.

**Course Name : CAC-201 - Data Structures Using 'C'**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the different methods to organize large amount of data.
CO2:	Explain how different data structures are used in operating system to handle processes.
CO3:	Create the programs using the concept of Pointers, Structures & Dynamic Memory Allocation.
CO4:	Classify various types of Data Structures.
CO5:	Express diverse methods for traversing trees.
CO6:	Evaluate alternative implementations of data structures with respect to performance.
CO7:	Choose the suitable type of Data Structure to implement the programs.



**Course Name : CAC-202 - OOP- C++**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the concepts of OOPs and the issues involved in effective class design.
CO2:	Differentiate between the Object Oriented Programming and Procedure Oriented Programming.
CO3:	Explain the use OOPs concepts such as information hiding, constructor, destructor, inheritance.
CO4:	Write C++ programs that use OOPs concepts such as information hiding, constructor, destructor, inheritance.
CO5:	Explain advanced features of C++ specifically stream I/O, templates and operator overloading.
CO6:	Develop the C++ application using file handling.
CO7:	Implement the C++ programs using exception handling.

**Course Name : CAC-203 - Elements of Mathematics**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Solve quantitative skills.
CO2:	Explain the concept of profit and loss, simple interest, transportation problems, and matrices and solve them.
CO3:	Explain the concept of ratio, proportion and percentage.
CO4:	Explain the concept of direct proportion, inverse proportion.
CO5:	Explain the concept of trade discount, cash discount, commission and brokerage.
CO6:	Explain the concept of simple interest, compound interest, EMI.
CO7:	Solve Linear equations and LPP problems.

**Course Name : CAC-204 - System Analysis and Design**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the software development process in depth.
CO2:	Draw software's context level diagrams.
CO3:	Explain the concept of Software project methods, configuration.
CO4:	Explain concept of software testing and its types.
CO5:	Summarize the concept of requirement of software, system analysis, and system design.



CO6:	Discuss the concept of cohesion, coupling and its types, and modules.
CO7:	Develop mini project using the concept of ERD, CLD, DFD.

**Course Name : CAC-205 - Database Management System**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the concept of how to organize, maintain and retrieve information - efficiently and effectively - from a DBMS.
CO2:	Distinguish the basic concepts of relational data model, entity-relationship model, relational database design, relational algebra and SQL.
CO3:	Prepare ER-models to represent simple database application scenarios.
CO4:	Illustrate the ER-model to relational tables, populate relational database and formulate SQL queries on data.
CO5:	Formulate SQL queries on data.
CO6:	Demonstrate different types of Data Models.
CO7:	Design the database design by using the concept of normalization.

**Course Name : CAC-206 - Human Resource Management**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain different functions in an organization and HRM Process concerned with planning, motivating and developing suitable employees for the benefit of the organization.
CO2:	Summarize the process and functions of organization.
CO3:	Explain the concept of management of an organization.
CO4:	Relate the concept of human resource like salary calculation, gratuity, PF.
CO5:	Express the concept of Bonus, and PPF and leave calculation of employees.
CO6:	Develop mini project for organization regarding HR process, and functions of management.

**Course Name : CAC-207 – Lab on CAC-201 and CAC -202**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Apply the knowledge of Data Structures and solve the problems practically.
CO2:	Use the software of C++ for problem solving.
CO3:	Develop programs using C++ and Data Structure.
CO4:	Demonstrate his theoretical knowledge practically in Computer Laboratory.



**Course Name : CAC-301 - Java**

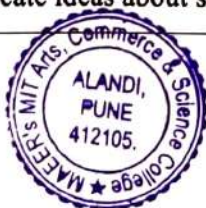
<b>Sr. No.</b>	<b>Course Outcomes (COs) -This course will enable the learners to:</b>
CO1:	Explain the basic concepts of Java Programming.
CO2:	Use the Java Programming in Day-to-Day Applications.
CO3:	Explain the concepts of object oriented programming.
CO4:	Describe the concepts of abstraction, inheritance etc.
CO5:	Describe the fundamental features of JAVA programming such as platform independence, garbage collector etc.
CO6:	Develop the java application using file handling.
CO7:	Use the different classes given in collection framework.

**Course Name : CAC-302 - Advance Database Concepts**

<b>Sr. No.</b>	<b>Course Outcomes (COs) -This course will enable the learners to:</b>
CO1:	Explain object oriented DBMS and Object relational DBMS concepts.
CO2:	Become aware of advance DBMS concepts.
CO3:	Can generalize Query optimization and query operators.
CO4:	Classify the transaction processing.
CO5:	Distinguish the role of database administrator in an organization.
CO6:	Identify issues arising from concurrent or distributed processing.
CO7:	Solve normalization techniques.

**Course Name : CAC-303 - Object Oriented Software Engineering**

<b>Sr. No.</b>	<b>Course Outcomes (COs) -This course will enable the learners to:</b>
CO1:	Explain concept of system design using UML.
CO2:	Describe system development through object-oriented techniques.
CO3:	Define employment in technical positions in software houses and with large-scale scientific and engineering users.
CO4:	Describe how to work with other people in a team, communicating computing ideas effectively in speech and in writing.
CO5:	Explain the design and communicate ideas about software system at different levels.





CO6:	Relate the develop an appreciation of the cost, quality, and management issues involved in software construction.
CO7:	Describe how to demonstrate component and deployment diagram.

**Course Name : CAC-304 - Network Operations**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain about computer network.
CO2:	Explain about various network topologies.
CO3:	Identify the different types of network devices and their functions within a network.
CO4:	Explain the use of connecting device used in network.
CO5:	Explain key networking protocols, and their hierarchical relationship in the context of a conceptual model, such as the OSI and TCP/IP framework.
CO6:	Explain and analyze different wired and wireless technologies.
CO7:	Identify the different types of network topologies and protocols.

**Course Name : CAC-305 – Lab on CAC-301 and CAC -302**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Apply the knowledge of ADBMS and solve the problems practically.
CO2:	Use the software of JAVA for problem solving.
CO3:	Develop programs using JAVA.
CO4:	Demonstrate his theoretical knowledge practically in Computer Laboratory.

**Course Name : CAC-306(Elective) - Introduction to Operating Systems**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Relate the concept of operating system with system programming.
CO2:	Interpret services provided by operating system and scheduling concepts.
CO3:	Classify different memory management techniques and resource management in Operating System.
CO4:	Relate various process management policies and scheduling of processes by CPU.
CO5:	Solve different problems of CPU scheduling, memory management techniques, Disk Scheduling.



CO6:	Explain the working of an OS as a resource manager; file system manager, process manager, memory manager and I/O manager.
CO7:	Discuss different types of operating system.
CO8:	Describe major components of operating system.

**Course Name : CAC-308(Elective) - Management Information Systems**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain Management Information Concepts.
CO2:	Describe about Decision Making and Various Information System.
CO3:	Explain about Object Oriented Technology.
CO4:	Differentiate between Knowledge and Information.
CO5:	Describe structure of MIS.
CO6:	Describe about System Concepts, Types, Classes.
CO7:	Explain about System Development Process.
CO8:	Describe about development of MIS.

**Course Name : CAC-309(Elective) – Project**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Design the software using concepts of SDLC and SE.
CO2:	Design the database using concepts of DBMS and RDBMS.
CO3:	Develop software using different IT technologies.
CO4:	Apply his theoretical knowledge practically to solve real life problems.

**Course Name : CAC-401 - Advance Java**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Explain the concepts of distributed applications.
CO2:	Differentiate between client side programming and server side programming.
CO3:	Describe the importance of session tracking and handle it.
CO4:	Develop distributed application.
CO5:	Develop application using database and connectivity through JAVA.
CO6:	Develop application by using Remote Method Invocation.



CO7:	Develop web based applications.
------	---------------------------------

**Course Name : CAC-402 - Visual Programming**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Describe Hungarian Notation and their use in windows Programming.
CO2:	Identify event driven programming concepts.
CO3:	Develop windows applications.
CO4:	Design the windows for gaming applications.
CO5:	Identify and locate child windows and parent windows.
CO6:	Create handle for mouse, scroll bars, window, etc.
CO7:	Differentiate the difference between mouse pointer and cursor.
CO8:	Utilize the resources of CPU effectively.

**Course Name : CAC-403 - Distributed Databases**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Learn about the architecture and design of distributed design.
CO2:	Summarize the concept of concurrency control, transaction management and distributed reliability.
CO3:	Identify the introductory distributed database concepts and its structures.
CO4:	Describe terms related to distributed object database design and management.
CO5:	Produce the transaction management and query processing techniques in DDBMS.
CO6:	Relate the importance and application of emerging database technology.
CO7:	Explain the architecture of a system based on distributed databases.

**Course Name : CAC-404 - Web Technology**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Student is able to explain web page site planning, management and maintenance.
CO2:	Differentiate Functioning of Database Web Application and Static Web Application.
CO3:	Develop static web applications using HTML & Javascript.
CO4:	Develop Styles for Static Web Applications using CSS.



CO5:	Develop HTML form Validation programs using JavaScript
CO6:	Student is able to know concepts of developing advanced HTML pages with the help of frames, scripting languages.
CO7:	Student is able develop the concept of internet application.

**Course Name : CAC-405 – Lab on CAC-401 and CAC -402**

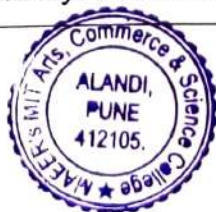
Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Apply the knowledge of Visual Programming and solve the problems practically.
CO2:	Use the software of Advance JAVA for problem solving.
CO3:	Develop programs using Advance JAVA.
CO4:	Demonstrate his theoretical knowledge practically in Computer Laboratory.

**Course Name : CAC-406(Elective) - IT Project Management**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Describe about basics of Project Management, Planning, Life cycle.
CO2:	Explain about Project Management Components.
CO3:	Discuss and differentiate various methods of Project estimation.
CO4:	Summarize Risk Management of Software Project.
CO5:	Explain about Quality Management and Testing of IT Project.
CO6:	Interpret Role of user in Project.
CO7:	Describe various concepts of software team Management.

**Course Name : CAC-407(Elective) - Cyber Law and IT Security**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Student describes different cyber laws, ethics, issues, sections in IT Act etc.
CO2:	Student determines different Information Security Techniques while working in day-to-day life.
CO3:	Student classifies different sections of IT Act 2000 that affect Information Technology Professional.
CO4:	Student determines different encryption techniques and able to implement it while developing Software Project.
CO5:	Student distinguishes different cyber-crimes and categories.



CO6:	Student spreads Cyber Awareness amongst society.
CO7:	Student describes different cyber laws, ethics, issues, sections in IT Act etc.

**Course Name : CAC-409(Elective) – Project**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Design the software using concepts of SDLC and SE.
CO2:	Design the database using concepts of DBMS and RDBMS.
CO3:	Develop software using different IT technologies.
CO4:	Supply IT technologies theoretical knowledge practically to solve real life problems.

**Course Name : CAC-501 - Advanced Web Programming**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Student is able to develop how to design web applications using ASP.Net.
CO2:	Explain how to study and how to access data with ADO.Net.
CO3:	Discuss different Ajax Controls.
CO4:	Develop their own tags and write a code for XML Programming Language.
CO5:	Write programs based on client side scripting as well as server side scripting.
CO6:	Differentiate predefined tags and user-defined tags.
CO7:	Handle PHP and MYSQL database.

**Course Name : CAC-502 - Data Center Technology**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Describe data center services according to business needs and industry practice.
CO2:	Discuss different components configurations and their suitability for different needs and situations.
CO3:	Describe the essential elements in a data center network.
CO4:	Decide the Total Cost of Ownership of operating a data center.
CO5:	Evaluate the business needs of data-center facility configurations that address business, financial, technology, regulatory, management, and operational needs.
CO6:	Express the landscape of data center technologies.
CO7:	Discuss development and the possible evolution to data center design.



**Course Name : CAC-503 - Information System Audit**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Define and describe about Information System Audits.
CO2:	Interpret System Audit concepts related to information.
CO3:	Describe information system threats and security.
CO4:	Explain about Disaster Recovery, IT Act regarding Information of organization.
CO5:	Explain about Business Continuity planning.
CO6:	Explain about emerging technologies.

**Course Name : CAC-504 - Content Management Systems**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Create own websites, they also can add how to add contents like images, texts, videos, audios in website.
CO2:	Manage data on websites.
CO3:	Use templates and create templates for designing websites.
CO4:	Experiment with different themes and modify themes.
CO5:	Create users with different kinds or levels of permissions.
CO6:	Read about web CMS and gain a basic understanding of it.
CO7:	Deal with the matter of content management on a general level, describing information technologies supporting the process such as Joomla, Word Press, SharePoint, Drupal, Alfresco, Wiki, Courseware and their effect on organization

**Course Name : CAC-505 – Lab on CAC-501 and CAC -502**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Apply the knowledge of Data Center Technology and solve the problems practically.
CO2:	Use the software of Advanced Web Programming for problem solving.
CO3:	Develop programs using Advanced Web Programming.
CO4:	Demonstrate his theoretical knowledge practically in Computer Laboratory.



**Course Name : CAC-506(Elective) - Mobile Communication**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Develop android Applications.
CO2:	Manage how mobile communication can be done using frequency division multiplexing.
CO3:	Classify the design parameters, link design, smart antenna, beam forming and MIMO systems.
CO4:	Familiarize with various generations of mobile communications.
CO5:	Discriminate Multiuser Systems, CDMA, WCDMA network planning and OFDM Concepts.
CO6:	Explain of GSM mobile communication standard, its architecture, logical channels, advantages and limitations.
CO7:	Describe the concept of cellular communication and understand the basics of wireless communication.

**Course Name : CAC-509(Elective) –Project**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Design the software using concepts of SDLC and SE.
CO2:	Design the database using concepts of DBMS and RDBMS.
CO3:	Develop software using different IT technologies.
CO4:	Apply his theoretical knowledge practically to solve real life problems.

**Course Name : CAC-601 – Industrial Training / Institutional Project**

Sr. No.	Course Outcomes (COs) -This course will enable the learners to:
CO1:	Analyze User Requirement.
CO2:	Design the software using concepts of SDLC and SE.
CO3:	Design the database using concepts of DBMS and RDBMS.
CO4:	Develop a software using different IT technologies.
CO5:	Apply his theoretical knowledge practically to solve real life problems.



Prof. Akshada Kulkarni

**HOD**

Dr. B. B. Waphare

**Principal**