

<b>Academic Year</b>	<b>2019-20</b>
----------------------	----------------

**B.P.H.E. Society's  
Ahmednagar College, Ahmednagar  
Internal Quality Assurance Cell  
CO, PO, and PSO Attainment Sheet**

<b>Department Name</b>	<b>Computer Science</b>
------------------------	-------------------------

<b>Program Name</b>	<b>BBA CA</b>
---------------------	---------------

<b>Program Outcomes(PO)</b>
-----------------------------

<b>PO1</b>	To produce skill oriented human resource.
<b>PO2</b>	To impart practical skills among students.
<b>PO3</b>	To make industry ready resource.
<b>PO4</b>	To bring the spirit of entrepreneurship.
<b>PO5</b>	To give students an solid academic basis on which to build a successful career in computer applications.
<b>PO6</b>	To give conceptual foundation for computer use and actual commercial application.
<b>PO7</b>	
<b>PO8</b>	
<b>PO9</b>	
<b>PO10</b>	
<b>PO11</b>	
<b>PO12</b>	

<b>Program Specific Outcome(PSO)</b>
--------------------------------------

<b>PSO1</b>	Students will be able to use modern methods and techniques in open-ended programming environments to create high-quality products that will help	
<b>PSO2</b>	Students would be able to learn about design and control strategies, information security approaches, and how to adapt to the rapidly changing needs of the information technology industry.	
<b>PSO3</b>	Students should be able to apply management and recent trends in the commerce match the industry and market requirement	

<b>Academic Year :</b>	<b>2019-20</b>
------------------------	----------------

Class		FY BBA CA	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-101			PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	Business Communication		CO1	3	3	2	1	2	1	2	1	2
Semester No	1		CO2	3	3	2	1	1	3	2	1	3
Teacher Name	Poornima Behere		CO3	3	2	3	3	1	2	3	2	3
Course Outcomes			CO4	3	2	3	2	3	2	2	2	2
	CO1	To understand what is the role of communication in personal and business world	CO5									
	CO2	To understand system and communication and their utility	Average	3.00	2.50	2.50	1.75	1.75	2.00	2.25	1.50	2.50
	CO3	To develop proficiency in how to write business letters and other communications in required Bsiness										
	CO4	To equip the students with necessary communication skills for recruitment process										
	CO5											

Class		FY BBA CA	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-102			PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	Principles of Management		CO1	3	2	3	2	3	2	1	2	3
Semester No	1		CO2	2	3	3	3	3	3	1	2	3
Teacher Name	Sayyed Ayeshah		CO3	3	3	2	3	2	3	1	1	3
Course Outcomes			CO4	3	3	2	2	3	3	1	1	3
	CO1	To understand basic concept regarding org. Business Administration	CO5									
	CO2	To examining how various management principles	Average	2.75	2.75	2.50	2.50	2.75	2.75	1.00	1.50	3.00
	CO3	To develop managerial skills among the students										
	CO4	To apply the managerial functions in different business setup										
	CO5											

Class		FY BBA CA	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-103			PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	C Language		CO1	3	3	2	1	3	3	3	3	2
Semester No	1		CO2	2	2	2	1	3	3	3	3	2
Teacher Name	Dhone Sayali		CO3	3	2	3	1	3	3	3	3	1
Course Outcomes			CO4	3	3	3	1	3	3	3	3	2
	CO1	To understand the concept of Procedural Programming	CO5									
	CO2	To acquire basic programming skills using C Programming Language	Average	2.75	2.50	2.50	1.00	3.00	3.00	3.00	3.00	1.75
	CO3	To make students easily switch over to any other language in future										
	CO4	Students will Improve logical thinking through practical knowledge of C Programming										
	CO5											

Class		FY BBA CA	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-104			PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	Database Management System		CO1	3	2	3	1	2	3	3	3	2
Semester No	1		CO2	3	3	3	1	2	3	3	3	2
Teacher Name	Patel Sana		CO3	3	3	3	1	3	3	3	3	1
Course Outcomes			CO4	3	3	3	1	3	3	3	3	1
	CO1	To develop skills related with Database basic Concepts.	CO5									
	CO2	To understand role and importance File Structures and Organization	Average	3.00	2.75	3.00	1.00	2.50	3.00	3.00	3.00	1.50
	CO3	To Learn about Relational Database Designing.										
	CO4	To Develop right understanding of various Data models										
	CO5											

Class		FY BBA CA	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-105			PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3

Subject Name	Statistics	CO1	3	3	2	1	3	2	3	1	1	
Semester No	1	CO2	3	3	2	1	2	2	3	2	2	
Teacher Name	Snehal Shinde	CO3	2	2	2	2	2	2	2	1	2	
Course Outcomes		CO4										
	CO1	To understand role and importance of statistics in various business situations	CO5									
	CO2	To develop skills related with basic statistical technique	Average	2.67	2.67	2.00	1.33	2.33	2.00	2.67	1.33	1.67
	CO3	Develop right understanding regarding regression, correlation and data interpretation										
	CO4											
	CO5											

Class	FY BBA CA	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-106		PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	Computer laboratry based on 103-104	CO1	3	3	2	1	2	3	3	3	2
Semester No	1	CO2	3	3	3	1	3	3	3	3	1
Teacher Name	Dhone sayali & Sonawane Nalinee	CO3	3	3	3	1	3	3	3	3	1
Course Outcomes		CO4	3	3	2	1	2	3	3	3	2
	CO1	To assess the knowledge of student in C and DBMS	CO5								
	CO2	To make students proficient in application of theory into the practical	Average	3.00	3.00	2.50	1.00	2.50	3.00	3.00	1.50
	CO3	To acquire knowledge on writing computer programs using C Language									
	CO4	To create and manage Database using SQL									
	CO5										

Class	FY BBA CA	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-017		PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	Add-On (PPA)	CO1	3	3	2	1	3	3	3	2	1
Semester No	1	CO2	3	3	3	1	2	3	3	3	1
Teacher Name	Sonawane Nalinee	CO3	3	3	3	1	2	3	2	3	1
Course Outcomes		CO4									

	CO1	To know the fundamentals of programming and designing.	CO5									
	CO2	To learn the algorithm analysis and notations	Average	3.00	3.00	2.67	1.00	2.33	3.00	2.67	2.67	1.00
	CO3	To understand the concept, problem and algorithm										
	CO4											
	CO5											

Class		FY BBA CA	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-201			PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	Organization Behavior & Human Resource Management		CO1	3	2	2	3	1	1	2	1	3
Semester No	2		CO2	3	2	3	3	1	1	1	1	3
Teacher Name	Sayyed Ayeshah		CO3	3	2	3	3	1	1	1	1	3
Course Outcomes			CO4	2	3	2	3	1	2	2	1	3
	CO1	To understand basic concept of HRM & OB	CO5	2	3	2	3	1	1	2	1	3
	CO2	To make aware students about traditional & modern methods of procurement & development in organization.	Average	2.60	2.40	2.40	3.00	1.00	1.20	1.60	1.00	3.00
	CO3	To know the major trends in HRM & OB										
	CO4	To make aware students about the recruitment and selection process for future										
	CO5	To make students undersatnd modern HRM processes										

Class		FY BBA CA	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-202			PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	Financial Accounting		CO1	3	2	2	2	1	1	2	1	3
Semester No	2		CO2	3	3	2	3	1	1	2	1	3
Teacher Name	Sayyed Ayeshah		CO3	3	2	2	2	1	2	1	2	2
Course Outcomes			CO4	2	3	2	3	1	2	2	2	3
	CO1	To develop right understanding regarding role and importance of monetary and financial transactions in business	CO5									
	CO2	To make the students understand the basic concept of financial accounting	Average	2.75	2.50	2.00	2.50	1.00	1.50	1.75	1.50	2.75
	CO3	To cultivate right approach towards classifications of different transactions and their implications										

	CO4	To develop proficiency preparation of basic financial as to how to write basis accounting statement - Trading and P&L
	CO5	

Class		FY BBA CA	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-203			PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	Business Mathematics		CO1	3	2	3	1	1	2	2	2	2
Semester No	2		CO2	3	3	2	1	1	2	2	2	2
Teacher Name	Shraddha Salve		CO3									
Course Outcomes			CO4									
	CO1	To understand role and importance of Mathematics in various business situations and while developing softwares.	CO5									
	CO2	To develop skills related with basic mathematical technique	Average	3.00	2.50	2.50	1.00	1.00	2.00	2.00	2.00	2.00
	CO3											
	CO4											
	CO5											

Class		FY BBA CA	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-204			PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	Rational Database		CO1	3	3	2	1	3	3	3	3	2
Semester No	2		CO2	3	3	2	1	3	2	3	3	2
Teacher Name	Sana Patel		CO3	2	3	3	1	3	3	3	3	1
Course Outcomes			CO4	3	3	3	1	3	3	3	3	1
	CO1	Enables students to understand relational database concepts and transaction management concepts in database system.	CO5	3	3	3	1	3	2	3	3	1
	CO2	Enables student to write PL/SQL programs that use: procedure, function, package, cursor and trigger.	Average	2.80	3.00	2.60	1.00	3.00	2.60	3.00	3.00	1.40
	CO3	Enables students to understand transaction management concepts in database system.										

	CO4	To Understand SQL/PLSQL the programming language of oracle
	CO5	Get Fundamental Knowledge of subject in Brief along with Software.

Class		FY BBA CA	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-205			PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	Web Technology HTML-JS-CSS		CO1	3	2	3	1	3	3	3	3	2
Semester No	2		CO2	3	2	3	1	3	2	3	3	1
Teacher Name	Avhad Sonali		CO3									
Course Outcomes			CO4									
	CO1	To know & understand concepts of internet programming.	CO5									
	CO2	To know & understand concepts of internet programming.	Average	3.00	2.00	3.00	1.00	3.00	2.50	3.00	3.00	1.50
	CO3											
	CO4											
	CO5											

Class		FY BBA CA	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-206			PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	Computer Laboratory based on 204-205		CO1	3	2	3	1	3	3	3	3	2
Semester No	2		CO2	3	2	3	1	3	2	3	3	1
Teacher Name	Dhone Sayali & Shaheen Shaikh		CO3	2	3	2	1	3	3	3	3	1
Course Outcomes			CO4									
	CO1	To assess the knowledge of student in RDBMS and Web Technology	CO5									
	CO2	To acquire knowledge on writing computer programs using concept of Web Technology	Average	2.67	2.33	2.67	1.00	3.00	2.67	3.00	3.00	1.33
	CO3	To create and manage Database using concept of RDBMS										
	CO4											
	CO5											

Class	FY BBA CA	Course Outcomes	Program Outcomes						PSOs		
-------	-----------	-----------------	------------------	--	--	--	--	--	------	--	--

Subject Code		CA-207	Course Outcomes			PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name		Add-on (Advance C)	CO1	3	2	3	1	3	3	3	3	3	2	
Semester No		2	CO2	3	3	3	1	3	3	3	3	3	2	
Teacher Name		Sonawane Nalinee	CO3											
Course Outcomes			CO4											
	CO1	To understand code organization with complex data types and structures.	CO5											
	CO2	To work with files.	Average	3.00	2.50	3.00	1.00	3.00	3.00	3.00	3.00	3.00	2.00	
	CO3													
	CO4													
	CO5													



<b>Academic Year :</b>	<b>2019-20</b>
------------------------	----------------

Class		SY BBA CA	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-301			PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	RELATIONAL DATABASE MANAGEMENT SYSTEMS		CO1	3	2	3	2	3	2	2	2	2
Semester No	III		CO2	2	2	2	2	2	2	1	2	1
Teacher Name	SHAIKH SHAHEEN		CO3	1	2	1	2	1	2	3	3	3
Course Outcomes			CO4									
	CO1	Apply the database concepts, technology and create the relations by specifying primary and foreign keys.	CO5									
	CO2	Construct a database by using data definition, data manipulation and control languages	Average	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.33	2.00
	CO3	Design a Database application and retrieve the values with the help of queries using SQL.										
	CO4											
	CO5											

Class		SY BBACA	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-302			PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	Data Structures using C		CO1	1	2	3	2	3	2	2	3	3
Semester No	III		CO2	3	2	1	1	1	1	2	2	1
Teacher Name	MADHAVI DETHE		CO3	2	2	1	3	1	3	2	3	3
Course Outcomes			CO4	1	2	2	1	2	1	1	2	2
	CO1	Students will be able to understand the concepts of ADTs and linear data structures-lists,stacks,queues	CO5									
	CO2	Students will be able to understand the sorting,searchingand hashing algorithmsand applytree and graph structures.	Average	1.75	2.00	1.75	1.75	1.75	1.75	1.75	2.50	2.25
	CO3	To learn linear data structures - list,stack and queue										
	CO4	To apply Tree and Graph structures										
	CO5											

Class		SY BBACA	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-303			PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	Operating System Concepts		CO1	3	3	2	2	3	2	2	2	3
Semester No	III		CO2	2	3	1	1	1	1	1	2	2
Teacher Name	LASGARE PRIYA		CO3	1	1	1	1	1	3	3	2	2
Course Outcomes			CO4	1	2	1	2	2	1	3	3	3
	CO1	To know the services provided by Operating System	CO5									
	CO2	To know the scheduling concept	Average	1.75	2.25	1.25	1.50	1.75	1.75	2.25	2.25	2.50
	CO3	To understand design issues related to memory management and various related algorithms										
	CO4	To understand design issues related to File management and various related algorithms										
	CO5											

Class		SY BBACA	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-304			PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	Business Mathematics		CO1	2	1	1	2	1	2	1	1	1
Semester No	III		CO2	2	1	1	3	1	3	2	2	2
Teacher Name	SALVE SHRADHA		CO3									
Course Outcomes			CO4									
	CO1	To understand role and importance of Mathematics in various business situations and while developing softwares.	CO5									
	CO2	To develop skills related with basic mathematical technique	Average	2.00	1.00	1.00	2.50	1.00	2.50	1.50	1.50	1.50
	CO3											
	CO4											
	CO5											

Class		SY BBACA	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-305			PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	Software Engineering		CO1	2	2	1	1	2	1	1	2	2
Semester No	III		CO2	2	3	2	2	3	2	1	1	1
Teacher Name	SONAWANE NALINEE		CO3									

Course Outcomes			CO4									
	CO1	Students will be able to understand the system concepts and learn software engineering concepts	CO5									
	CO2	Students will be able to understand the applications of software engineering concepts and design in software development	Average	2.00	2.50	1.50	1.50	2.50	1.50	1.00	1.50	1.50
	CO3											
	CO4											
	CO5											

Class	SY BBACA	Course Outcomes	Program Outcomes						PSOs			
Subject Code	CA-306	Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3	
Subject Name	Laboratory Course – III [Based on Paper No. 301 and 302 ]	CO1	1	2	1	1	2	1	1	2	2	
Semester No	III	CO2	2	2	1	2	2	1	3	3	3	
Teacher Name	MADHAVI DETHE, SHAIKH SHAHEEN	CO3	2	3	1	2	3	1	3	2	2	
Course Outcomes		CO4										
	CO1	Apply the database concepts, technology and create the relations by specifying primary and foreign keys.	CO5									
	CO2	Construct a database by using data definition, data manipulation and control languages	Average	1.67	2.33	1.00	1.67	2.33	1.00	2.33	2.33	2.33
	CO3	Students will be able to understand the concepts of ADTs and linear data structures-lists,stacks,queues										
	CO4											
	CO5											

Class	SY BBACA	Course Outcomes	Program Outcomes						PSOs			
Subject Code	CA 401	Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3	
Subject Name	OOP's using C++	CO1	1	2	3	1	3	1	2	1	2	
Semester No	IV	CO2	2	1	2	1	2	1	1	2	2	
Teacher Name	MADHAVI DETHE	CO3										
Course Outcomes		CO4										
	CO1	To understand the basic concepts of object oriented concepts and issues involved in effective class design	CO5									
	CO2	To enable students to write programs using C++ features like operator overloading,constructor and destructor , inheritance,polymorphism and exception handling	Average	1.50	1.50	2.50	1.00	2.50	1.00	1.50	1.50	2.00
	CO3											
	CO4											

CO5
-----

Class		SY BBACA	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA 402	Subject Name		PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	Programming in Visual Basic		CO1	2	2	1	1	1	1	1	2	2
Semester No	IV		CO2	2	3	3	2	3	2	2	3	2
Teacher Name	SAYALI DHORE		CO3	2	1	1	2	1	2	3	3	2
Course Outcomes			CO4									
	CO1	Students list the visual programming concepts.	CO5									
	CO2	Students code visual programs by using Visual Basic work environment	Average	2.00	2.00	1.67	1.67	1.67	1.67	2.00	2.67	2.00
	CO3	Students prepare various projects by helping visual programming.										
	CO4											
	CO5											

Class		SY BBACA	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA 403	Subject Name		PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	Computer Networking		CO1	2	2	1	3	1	3	2	3	3
Semester No	IV		CO2	2	3	1	1	1	1	1	2	2
Teacher Name	NALINEE SONAWANE		CO3	2	1	1	1	1	1	1	1	3
Course Outcomes			CO4									
	CO1	To gain knowledge of computer network concepts	CO5									
	CO2	To know about working on networking models, addresses, transmission media and connectivity devices	Average	2.00	2.00	1.00	1.67	1.00	1.67	1.33	2.00	2.67
	CO3	To acquire information about network security and cryptography										
	CO4											
	CO5											

Class		SY BBACA	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA 404	Subject Name		PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	Enterprise Resource Planning		CO1	2	2	1	1	1	1	2	3	2
Semester No	IV		CO2	2	2	2	2	2	2	1	1	3
Teacher Name	LASGARE PRIYA		CO3									

Course Outcomes			CO4									
	CO1	Demonstrate a good understanding of basic issues in Enterprise Systems	CO5									
	CO2	Describe the selection, acquisition and implementation of enterprise systems	Average	2.00	2.00	1.50	1.50	1.50	1.50	1.50	2.00	2.50
	CO3											
	CO4											
	CO5											
	CO5											

Class	SY BBACA	Course Outcomes	Program Outcomes						PSOs			
Subject Code	CA 405		PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3	
Subject Name	Human Resource Management	CO1	1	2	3	2	3	2	3	2	3	
Semester No	IV	CO2	1	2	2	1	2	1	2	2	3	
Teacher Name	AYESHA SAYYED	CO3	1	1	1	1	1	1	3	1	1	
Course Outcomes		CO4										
	CO1	Understand and apply Human Resource Management Perspective	CO5									
	CO2	Ability to recruit Select and interview job candidates	Average	1.00	1.67	2.00	1.33	2.00	1.33	2.67	1.67	2.33
	CO3	Apply the factors determining pay rates										
	CO4											
	CO5											

Class	SY BBACA	Course Outcomes	Program Outcomes						PSOs			
Subject Code	CA 406		PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3	
Subject Name	Laboratory Course – IV [Based on Paper No. 401 & 402 ]	CO1	2	3	3	3	1	2	3	3	1	
Semester No	IV	CO2	3	3	3	3	2	1	3	2	2	
Teacher Name	SHEETAL AWATE, SAYYED AYESHA	CO3										
Course Outcomes		CO4										
	CO1	To understand the basic concepts of object oriented concepts and issues involved in effective class design	CO5									
	CO2	Students prepare various projects by helping visual programming.	Average	2.50	3.00	3.00	3.00	1.50	1.50	3.00	2.50	1.50
	CO3											
	CO4											
	CO5											

<b>Academic Year :</b>	<b>2019-20</b>
------------------------	----------------

Class		TYBBA(CA)	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-501	PO1		PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3	
Subject Name	JAVA PROGRAMMING	CO1	3	3	3	3	3	3	2	3	2	
Semester No	V	CO2	3	2	3	2	3	3	3	2	1	
Teacher Name	Mrs. Madhavi dethe	CO3										
Course Outcomes		CO4										
	CO1	To learn the basic concept of Java Programming	CO5									
	CO2	To understand how to use programming in day to day applications.	Average	3.00	2.50	3.00	2.50	3.00	3.00	2.50	1.50	
	CO3											
	CO4											
	CO5											

Class		TYBBA(CA)	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-502	PO1		PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3	
Subject Name	WEB TECHNOLOGIES	CO1	2	1	2	3	1	1	2	2	3	
Semester No	V	CO2	1	0	1	2	3	3	1	3	2	
Teacher Name	PATEL SANA	CO3										
Course Outcomes		CO4										
	CO1	To know & understand concepts of internet programming.	CO5									
	CO2	To understand how to develop web based applications using PHP.	Average	1.50	0.50	1.50	2.50	2.00	2.00	1.50	2.50	
	CO3											
	CO4											
	CO5											

Class		TYBBA(CA)	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-503	PO1		PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3	
Subject Name	DOT NET PROGRAMMING	CO1	1	2	2	2	3	2	2	2	2	

Semester No	v	CO2	2	1	2	3	2	2	2	3	2	
Teacher Name	DHONE SAYALI	CO3										
Course Outcomes		CO4										
	CO1	This will introduce visual programming and event driven programming practically.	CO5									
	CO2	This will enhance applications development skill of the student.	Average	1.50	1.50	2.00	2.50	2.50	2.00	2.00	2.50	2.00
	CO3											
	CO4											
	CO5											

Class	TYBBA(CA)	Course Outcomes	Program Outcomes						PSOs			
Subject Code	CA-504		PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3	
Subject Name	OOSE	CO1	2	3	2	3	3	3	2	3	2	
Semester No	v	CO2	2	2	3	3	2	3	3	2	3	
Teacher Name	AWATE S.A.	CO3										
Course Outcomes		CO4										
	CO1	To Understand concept of system design using UML.	CO5									
	CO2	To understand system development through object oriented techniques.	Average	2.00	2.50	2.50	3.00	2.50	3.00	2.50	2.50	2.50
	CO3											
	CO4											
	CO5											

Class	TYBBA(CA)	Course Outcomes	Program Outcomes						PSOs			
Subject Code	CA-505		PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3	
Subject Name	Software Project – I [Based on C++ / VB Technology]	CO1	3	2	3	3	3	3	3	2	3	
Semester No	v	CO2	3	3	3	3	3	2	3	3	3	
Teacher Name	AWATE S.A	CO3										
Course Outcomes		CO4										
	CO1	To know & understand concepts of internet programming.	CO5									
	CO2	To understand the concepts of XML and AJAX.	Average	3.00	2.50	3.00	3.00	3.00	2.50	3.00	2.50	3.00
	CO3											
	CO4											
	CO5											

Class		TYBBA(CA)	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-506			PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	Laboratory Course – V [Based on Paper No. 501 & 502 ]		CO1	3	3	3	3	3	3	3	3	2
Semester No	V		CO2	3	3	3	3	2	2	3	3	2
Teacher Name	SANA PATEL & DETHE MADHAVI		CO3	3	2	3	3	3	3	2	3	3
Course Outcomes			CO4									
	CO1	To know software development using JAVA	CO5									
	CO2	To study documentation,reports making	Average	3.00	2.67	3.00	3.00	2.67	2.67	2.67	3.00	2.33
	CO3	To create web based applications using WEB TECH.										
	CO4											
	CO5											

Class		TYBBA(CA)	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-507			PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	Advanced Web Technologies		CO1	2	2	2	2	3	2	3	3	1
Semester No	VI		CO2	2	2	1	2	2	2	2	3	2
Teacher Name	SANA PATEL		CO3									
Course Outcomes			CO4									
	CO1	To know & understand concepts of internet programming.	CO5									
	CO2	To understand the concepts of XML and AJAX.	Average	2.00	2.00	1.50	2.00	2.50	2.00	2.50	3.00	1.50
	CO3											
	CO4											
	CO5											

Class		TYBBA(CA)	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-601			PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	Advanced Java		CO1	3	3	3	3	3	3	3	3	3
Semester No	VI		CO2	2	2	2	3	3	2	3	2	3
Teacher Name	DETHE MADHAVI		CO3	3	2	2	2	3	3	3	3	3
Course Outcomes			CO4									
	CO1	To know the concept of Java Programming.	CO5									
	CO2	To understand how to use programming in day to day applications.	Average	2.67	2.33	2.33	2.67	3.00	2.67	3.00	2.67	3.00
	CO3	To develop programming logic.										
	CO4											



	CO5	
--	-----	--

Class		TYBBA(CA)	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-602			PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	RECENT TRENDS IN IT		CO1	2	3	2	2	3	3	3	3	2
Semester No	VI		CO2	1	2	3	2	2	2	2	2	1
Teacher Name	SHAHEEN SHAIKH		CO3									
Course Outcomes			CO4									
	CO1	To introduce upcoming trends in Information technology.	CO5									
	CO2	To study Eco friendly software development.	Average	1.50	2.50	2.50	2.00	2.50	2.50	2.50	2.50	1.50
	CO3											
	CO4											
	CO5											

Class		TYBBA(CA)	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-603			PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	SOFTWARE TESTING		CO1	3	3	3	3	3	3	3	3	3
Semester No	VI		CO2	3	3	2	2	3	3	2	2	2
Teacher Name	AWATE S.A		CO3	2	3	3	3	2	3	3	3	2
Course Outcomes			CO4									
	CO1	To know the concept of software testing.	CO5									
	CO2	To understand how to test bugs in software.	Average	2.67	3.00	2.67	2.67	2.67	3.00	2.67	2.67	2.33
	CO3	To develop programming logic.										
	CO4											
	CO5											

Class		TYBBA(CA)	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-604			PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	Software Project – II [Java / Dot net Technology]		CO1	3	3	3	3	3	3	3	3	3
Semester No	VI		CO2	3	3	2	2	3	3	3	2	2
Teacher Name	AWATE S.A		CO3	2	3	3	3	2	2	2	3	2
Course Outcomes			CO4									
	CO1	To know advance software development	CO5									
	CO2	To build projects based on JAVA/DOT NET	Average	2.67	3.00	2.67	2.67	2.67	2.67	2.67	2.67	2.33

	CO3	To know creation, development and documentation, test report
	CO4	
	CO5	

Class		TYBBA(CA)	Course Outcomes	Program Outcomes						PSOs		
Subject Code	CA-605			PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
Subject Name	Laboratory Course – VI [Based on Paper No. 601 & 602 ]		CO1	3	3	3	3	3	3	3	3	2
Semester No	VI		CO2	3	2	3	3	3	2	2	3	3
Teacher Name	SANA PATEL &DETHE MADHAVI		CO3	3	3	3	3	3	3	3	3	2
Course Outcomes			CO4									
	CO1	To build application based on advance concepts of JAVA & WEB	CO5									
	CO2	To create web application and create connectivity	Average	3.00	2.67	3.00	3.00	3.00	2.67	2.67	3.00	2.33
	CO3	To develop enterprise apps and use advance features										
	CO4											
	CO5											

<b>CO-PO Mapping</b>
----------------------

		Course	PO1	PO2	PO3	PO4	PO5	PO6
FY	FY	1 CA-101	3.00	2.50	2.50	1.75	1.75	2.00
		2 CA-102	2.75	2.75	2.50	2.50	2.75	2.75
		3 CA-103	2.75	2.50	2.50	1.00	3.00	3.00
		4 CA-104	3.00	2.75	3.00	1.00	2.50	3.00
		5 CA-105	2.67	2.67	2.00	1.33	2.33	2.00
		6 CA-106	3.00	3.00	2.50	1.00	2.50	3.00
		7 CA-017	3.00	3.00	2.67	1.00	2.33	3.00
		8 CA-201	2.60	2.40	2.40	3.00	1.00	1.20
		9 CA-202	2.75	2.50	2.00	2.50	1.00	1.50
		10 CA-203	3.00	2.50	2.50	1.00	1.00	2.00
		11 CA-204	2.80	3.00	2.60	1.00	3.00	2.60
		12 CA-205	3.00	2.00	3.00	1.00	3.00	2.50
		13 CA-206	2.67	2.33	2.67	1.00	3.00	2.67
		14 CA-207	3.00	2.50	3.00	1.00	3.00	3.00
SY	SY	1 CA-301	2.00	2.00	2.00	2.00	2.00	2.00
		2 CA-302	1.75	2.00	1.75	1.75	1.75	1.75
		3 CA-303	1.75	2.25	1.25	1.50	1.75	1.75
		4 CA-304	2.00	1.00	1.00	2.50	1.00	2.50
		5 CA-305	2.00	2.50	1.50	1.50	2.50	1.50
		6 CA-306	1.67	2.33	1.00	1.67	2.33	1.00
		7 CA 401	1.50	1.50	2.50	1.00	2.50	1.00
		8 CA 402	2.00	2.00	1.67	1.67	1.67	1.67
		9 CA 403	2.00	2.00	1.00	1.67	1.00	1.67
		10 CA 404	2.00	2.00	1.50	1.50	1.50	1.50
		11 CA 405	1.00	1.67	2.00	1.33	2.00	1.33
		12 CA 406	2.50	3.00	3.00	3.00	1.50	1.50
TY	TY	1 CA-501	3.00	2.50	3.00	2.50	3.00	3.00
		2 CA-502	1.50	0.50	1.50	2.50	2.00	2.00
		3 CA-503	1.50	1.50	2.00	2.50	2.50	2.00
		4 CA-504	2.00	2.50	2.50	3.00	2.50	3.00
		5 CA-505	3.00	2.50	3.00	3.00	3.00	2.50
		6 CA-506	3.00	2.67	3.00	3.00	2.67	2.67
		7 CA-507	2.00	2.00	1.50	2.00	2.50	2.00
		8 CA-601	2.67	2.33	2.33	2.67	3.00	2.67
		9 CA-602	1.50	2.50	2.50	2.00	2.50	2.50
		10 CA-603	2.67	3.00	2.67	2.67	2.67	3.00
		11 CA-604	2.67	3.00	2.67	2.67	2.67	2.67
		12 CA-605	3.00	2.67	3.00	3.00	3.00	2.67

## CO-PO ATTAINMENT

PO1	PO2	PO3	PO4	PO5	PO6
2.36	1.966667	1.966667	1.376666667	1.376667	1.573333
2.31	2.31	2.1	2.1	2.31	2.31
0.843333	0.766667	0.766667	0.306666667	0.92	0.92
1.72	1.576667	1.72	0.573333333	1.433333	1.72
0.533333	0.533333	0.4	0.266666667	0.466667	0.4
3	3	2.5	1	2.5	3
3	3	2.666667	1	2.333333	3
1.629333	1.504	1.504	1.88	0.626667	0.752
1.43	1.3	1.04	1.3	0.52	0.78
2.68	2.233333	2.233333	0.893333333	0.893333	1.786667
2.352	2.52	2.184	0.84	2.52	2.184
2.2	1.466667	2.2	0.733333333	2.2	1.833333
2.666667	2.333333	2.666667	1	3	2.666667
3	2.5	3	1	3	3
1.04	1.04	1.04	1.04	1.04	1.04
1.19	1.36	1.19	1.19	1.19	1.19
0.91	1.17	0.65	0.78	0.91	0.91
1.36	0.68	0.68	1.7	0.68	1.7
1.04	1.3	0.78	0.78	1.3	0.78
1.666667	2.333333	1	1.666666667	2.333333	1
0.54	0.54	0.9	0.36	0.9	0.36
1.36	1.36	1.133333	1.133333333	1.133333	1.133333
0.72	0.72	0.36	0.6	0.36	0.6
0.72	0.72	0.54	0.54	0.54	0.54
0.2	0.333333	0.4	0.266666667	0.4	0.266667
2.5	3	3	3	1.5	1.5
1.24	1.033333	1.24	1.033333333	1.24	1.24
0.62	0.206667	0.62	1.033333333	0.826667	0.826667
0.62	0.62	0.826667	1.033333333	1.033333	0.826667
0.826667	1.033333	1.033333	1.24	1.033333	1.24
3	2.5	3	3	3	2.5
3	2.666667	3	3	2.666667	2.666667
2	2	1.5	2	2.5	2
1.528889	1.337778	1.337778	1.528888889	1.72	1.528889
0.86	1.433333	1.433333	1.146666667	1.433333	1.433333
1.528889	1.72	1.528889	1.528888889	1.528889	1.72
1.244444	1.4	1.244444	1.244444444	1.244444	1.244444
3	2.666667	3	3	3	2.666667

## Percentage CO-PO ATTAINMENT

PO1	PO2	PO3	PO4	PO5	PO6
78.66667	78.66667	78.66667	78.66667	78.66667	78.66667
84	84	84	84	84	84
30.66667	30.66667	30.66667	30.66667	30.66667	30.66667
57.33333	57.33333	57.33333	57.33333	57.33333	57.33333
20	20	20	20	20	20
100	100	100	100	100	100
100	100	100	100	100	100
62.66667	62.66667	62.66667	62.66667	62.66667	62.66667
52	52	52	52	52	52
89.33333	89.33333	89.33333	89.33333	89.33333	89.33333
84	84	84	84	84	84
73.33333	73.33333	73.33333	73.33333	73.33333	73.33333
100	100	100	100	100	100
100	100	100	100	100	100
52	52	52	52	52	52
68	68	68	68	68	68
52	52	52	52	52	52
68	68	68	68	68	68
52	52	52	52	52	52
100	100	100	100	100	100
36	36	36	36	36	36
68	68	68	68	68	68
36	36	36	36	36	36
36	36	36	36	36	36
20	20	20	20	20	20
100	100	100	100	100	100
41.33333	41.33333	41.33333	41.33333	41.33333	41.33333
41.33333	41.33333	41.33333	41.33333	41.33333	41.33333
41.33333	41.33333	41.33333	41.33333	41.33333	41.33333
41.33333	41.33333	41.33333	41.33333	41.33333	41.33333
100	100	100	100	100	100
100	100	100	100	100	100
100	100	100	100	100	100
57.33333	57.33333	57.33333	57.33333	57.33333	57.33333
57.33333	57.33333	57.33333	57.33333	57.33333	57.33333
57.33333	57.33333	57.33333	57.33333	57.33333	57.33333
46.66667	46.66667	46.66667	46.66667	46.66667	46.66667
100	100	100	100	100	100

## CO-PSO MAPPING

	Course	PSO1	PSO2	PSO3
FY	1 CA-101	2.25	1.50	2.50
	2 CA-102	1.00	1.50	3.00
	3 CA-103	3.00	3.00	1.75
	4 CA-104	3.00	3.00	1.50
	5 CA-105	2.67	1.33	1.67
	6 CA-106	3.00	3.00	1.50
	7 CA-017	2.67	2.67	1.00
	8 CA-201	1.60	1.00	3.00
	9 CA-202	1.75	1.50	2.75
	10 CA-203	2.00	2.00	2.00
	11 CA-204	3.00	3.00	1.40
	12 CA-205	3.00	3.00	1.50
	13 CA-206	3.00	3.00	1.33
	14 CA-207	3.00	3.00	2.00
SY	1 CA-301	2.00	2.33	2.00
	2 CA-302	1.75	2.50	2.25
	3 CA-303	2.25	2.25	2.50
	4 CA-304	1.50	1.50	1.50
	5 CA-305	1.00	1.50	1.50
	6 CA-306	2.33	2.33	2.33
	7 CA 401	1.50	1.50	2.00
	8 CA 402	2.00	2.67	2.00
	9 CA 403	1.33	2.00	2.67
	10 CA 404	1.50	2.00	2.50
	11 CA 405	2.67	1.67	2.33
	12 CA 406	3.00	2.50	1.50
TY	1 CA-501	2.50	2.50	1.50
	2 CA-502	1.50	2.50	2.50
	3 CA-503	2.00	2.50	2.00
	4 CA-504	2.50	2.50	2.50
	5 CA-505	3.00	2.50	3.00
	6 CA-506	2.67	3.00	2.33
	7 CA-507	2.50	3.00	1.50
	8 CA-601	3.00	2.67	3.00
	9 CA-602	2.50	2.50	1.50
	10 CA-603	2.67	2.67	2.33
	11 CA-604	2.67	2.67	2.33
	12 CA-605	2.67	3.00	2.33

## CO-PSO ATTAINMENT

Course	PSO1	PSO2	PSO3
CA-101	1.77	1.18	1.966667
CA-102	0.84	1.26	2.52
CA-103	0.92	0.92	0.536667
CA-104	1.72	1.72	0.86
CA-105	0.533333	0.266667	0.333333
CA-106	3	3	1.5
CA-017	2.666667	2.666667	1
CA-201	1.002667	0.626667	1.88
CA-202	0.91	0.78	1.43
CA-203	1.786667	1.786667	1.786667
CA-204	2.52	2.52	1.176
CA-205	2.2	2.2	1.1
CA-206	3	3	1.333333
CA-207	3	3	2
CA-301	1.04	1.213333	1.04
CA-302	1.19	1.7	1.53
CA-303	1.17	1.17	1.3
CA-304	1.02	1.02	1.02
CA-305	0.52	0.78	0.78
CA-306	2.333333	2.333333	2.333333
CA 401	0.54	0.54	0.72
CA 402	1.36	1.813333	1.36
CA 403	0.48	0.72	0.96
CA 404	0.54	0.72	0.9
CA 405	0.533333	0.333333	0.466667
CA 406	3	2.5	1.5
CA-501	1.033333	1.033333	0.62
CA-502	0.62	1.033333	1.033333
CA-503	0.826667	1.033333	0.826667
CA-504	1.033333	1.033333	1.033333
CA-505	3	2.5	3
CA-506	2.666667	3	2.333333
CA-507	2.5	3	1.5
CA-601	1.72	1.528889	1.72
CA-602	1.433333	1.433333	0.86
CA-603	1.528889	1.528889	1.337778
CA-604	1.244444	1.244444	1.088889
CA-605	2.666667	3	2.333333

## Percentage CO-PSO ATTAINMENT

Course	PSO1	PSO2	PSO3
CA-101	78.66667	78.66667	78.66667
CA-102	84	84	84
CA-103	30.66667	30.66667	30.66667
CA-104	57.33333	57.33333	57.33333
CA-105	20	20	20
CA-106	100	100	100
CA-017	100	100	100
CA-201	62.66667	62.66667	62.66667
CA-202	52	52	52
CA-203	89.33333	89.33333	89.33333
CA-204	84	84	84
CA-205	73.33333	73.33333	73.33333
CA-206	100	100	100
CA-207	100	100	100
CA-301	52	52	52
CA-302	68	68	68
CA-303	52	52	52
CA-304	68	68	68
CA-305	52	52	52
CA-306	100	100	100
CA 401	36	36	36
CA 402	68	68	68
CA 403	36	36	36
CA 404	36	36	36
CA 405	20	20	20
CA 406	100	100	100
CA-501	41.33333	41.33333	41.33333
CA-502	41.33333	41.33333	41.33333
CA-503	41.33333	41.33333	41.33333
CA-504	41.33333	41.33333	41.33333
CA-505	100	100	100
CA-506	100	100	100
CA-507	100	100	100
CA-601	57.33333	57.33333	57.33333
CA-602	57.33333	57.33333	57.33333
CA-603	57.33333	57.33333	57.33333
CA-604	46.66667	46.66667	46.66667
CA-605	100	100	100