

Academic Year	2018-19
----------------------	----------------

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

Department Name	COMPUTER SCIENCE
------------------------	-----------------------------

Program Name	BCA(SCIENCE)
---------------------	---------------------

Program Outcomes(PO)

PO1	APPLY COMPUTER LITERACY OF STUDENTS AND BASIC UNDERSTANDING OF OPERATIVE SYSTEMS AND
PO2	UTILIZE KNOWLDEGE OF ORGANIZE INFORMATION EFFICIENTLY IN THE FORMS OF OUTLINES, CHARTS,ETC.
PO3	DEVELOP PROGRAMMING SKILLS TO PRESENT IDEAS EFFECTIVELY AND EFFICIENTLY IN ANDROID
PO4	DESIGNING AND DELIVERING AN EFFECTIVE PRESENTATION IN INTERNET OF THINGS(IoT)
PO5	APPLY SYSTEMS ANALYSIS DESIGN PARADIGM TO CRITICALLY ANALYZE A ERRORS RELATED TO SOFTWARE
PO6	SOLVE PROBLEMS(PROGRAMMING NETWORKING DATABASE AND WEB DESIGN) IN INFORMATION
PO7	APPLY PROFESSIONAL BEHAVIOR IN PROFESSIONAL IT ENVIRONMENT RELATED TO EMPLOYABILITY.
PO8	APPLY NETWORKING TECHNOLOGIES IN INTEGRATED IT SYSTEMS IN AN IT ENVIRONMENT.
PO9	SOFTWARE SYSTEMS AS WELL AS PROVIDE SUPPORT TO AUTOMATED SYSTEMS OR APPLICATIONS.
PO10	ENTERPRISES.
PO11	
PO12	

Program Specific Outcome(PSO)

PSO1	FUNDEMENTAL KNOWLDEGE OF COMPUTERS, COMPUTER ORGINZATION AND C PROGRAMMING.
PSO2	SYSTEM.
PSO3	PROGRAMMING AND GO PROGRAMMING

Academic Year :	2018-19
------------------------	----------------

Class		FYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA101			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	FUNDAMENTALS OF COMPUTER	CO1	2	2	1	1	1	1	2	2	2	2	3	3	3	
Semester No	I	CO2	3	3	3	2	3	2	3	2	3	2	3	3	3	
Teacher Name	Patel Sana	CO3	3	2	3	3	2	3	3	2	3	2	3	3	3	
Course Outcomes		CO4	3	3	3	2	2	3	2	2	3	2	3	3	3	
	CO1	THE OBJECTIVE OF THIS COURSE IS TO STUDY THE BASICS OF COMPUTER SYSTEM AND TO LEARN HOW TO CONFIGURE COMPUTER DEVICES.	CO5													
	CO2	TROUBLESHOOT THE COMPUTER SYSTEMS AND USE UTILITY SOFTWARE	Average	2.75	2.50	2.50	2.00	2.00	2.25	2.50	2.00	2.75	2.00	3.00	3.00	3.00
	CO3	CHOOSE COMMANDS AND FEATURES OF OPERATING SYSTEMS AND APPLICATION SOFTWARE														
	CO4	USE OPEN SOURCE SOFTWARE														
	CO5															

Class		FYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA102			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	INTRODUCTION TO PROGRAMMING AND PROGRAMMING IN C	CO1	3	3	3	3	3	3	2	2	3	3	3	3	3	
Semester No	I	CO2	2	3	3	3	3	2	3	2	3	3	3	3	3	
Teacher Name	Sayyed Amara	CO3	3	3	3	3	3	3	3	3	3	3	3	3	3	
Course Outcomes		CO4	2	2	2	3	3	3	2	2	2	2	3	3	3	

	CO1	THE OBJECTIVE OF THIS COURSE IS TO PROVIDE A BOARD OVERVIEW OF PROBLEM SOLVING TECHNIQUES AND USE OF C LANGUAGE PROGRAMMING TO SOLVE THERE PROBLEMS.	CO5													
	CO2	FORMULATE ALGORITHM AND DRAW FLOW CHART TO SOLVE A GIVEN PROBLEM	Average	2.50	2.75	2.75	3.00	3.00	2.75	2.50	2.25	2.75	2.75	3.00	3.00	3.00
	CO3	EXPLAIN USE OF APPROPRIATE DATA TYPES, CONTROL STATEMENTS														
	CO4	DEMONSTRATE ABILITY TO USE TOP-DOWN PROGRAM DESIGN														
	CO5															

Class		FYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA103			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	APPLIED MATHEMATICS - I		CO1	3	3	3	3	3	3	2	2	3	3	3	3	3
Semester No	I		CO2	2	3	3	3	3	2	3	2	3	3	3	3	3
Teacher Name	Namarta Mahankale		CO3	3	3	3	3	3	3	3	3	3	3	3	3	3
Course Outcomes			CO4	2	2	2	3	3	3	2	2	2	2	3	3	3
	CO1	THE OBJECTIVE OF THIS COURSE IS TO STUDY THE APPLIED MATHEMATICS.	CO5	2	2	2	2	2	2	2	2	2	2	2	2	2
	CO2	USE FUNCTION OR RELATION MODELS TO INTERPRET ASSOCIATED RELATIONSHIPS	Average	2.40	2.60	2.60	2.80	2.80	2.60	2.40	2.20	2.60	2.60	2.80	2.80	2.80
	CO3	APPLY BASIC COUNTING TECHNIQUES AND USE PRINCIPLES OF PROBABILITY														
	CO4	GIVEN A DATA, COMPUTE VARIOUS STATISTICAL MEASURES OF CENTRAL TENDENCY														
	CO5	USE APPROPRIATE SAMPLING TECHNIQUES														

Class		FYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA104			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	COMMUNICATION SKILLS		CO1	3	3	2	2	3	2	3	3	3	2	3	3	3

Semester No	I	CO2	2	2	3	3	3	2	3	3	3	2	3	3	3	
Teacher Name	Tejal Sonawane	CO3	2	3	2	3	3	3	2	2	3	3	3	3	3	
Course Outcomes		CO4	3	3	2	3	3	3	2	2	3	3	0	0	0	
	CO1	APPLY BUSINESS COMMUNICATION STRATEGIES AND PRINCIPLES TO PREPARE EFFECTIVE COMMUNICATION FOR DOMESTIC AND INTERNATIONAL BUSINESS SITUATIONS.	CO5													
	CO2	IDENTIFY ETHICAL, LEGAL, CULTURAL, AND GLOBAL ISSUES AFFECTING BUSINESS COMMUNICATION.	Average	2.50	2.75	2.25	2.75	3.00	2.50	2.50	2.50	3.00	2.50	2.25	2.25	2.25
	CO3	PARTICIPATE IN TEAM ACTIVITIES USING COLLABORATIVE WORK SKILLS.														
	CO4	COMMUNICATE VIA ELECTRONIC MAIL, INTERNET, AND OTHER TECHNOLOGIES														
	CO5	DELIVER AN EFFECTIVE ORAL BUSINESS PRESENTATION														

Class	FYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs			
Subject Code	BCA105		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	
Subject Name	LAB - I	CO1	3	3	3	3	2	2	2	2	3	3	3	3	3	
Semester No	I	CO2	3	3	3	3	3	3	2	2	2	3	3	3	3	
Teacher Name	Suvarna Pardeshi+ Aamera Syyed	CO3	3	3	3	3	3	3	2	2	2	2	3	3	3	
Course Outcomes		CO4														
	CO1	DESIGN AND IMPLEMENT 'C' PROGRAMS FOR SIMPLE PROBLEMS	CO5													
	CO2	UNDERSTAND APPROPRIATE USE OF DATA TYPES AND ARRAY STRUCTURES.	Average	3.00	3.00	3.00	3.00	2.67	2.67	2.00	2.00	2.33	2.67	3.00	3.00	3.00
	CO3	UNDERSTAND THE USE OF APPROPRIATE CONTROL STRUCTURES														
	CO4															
	CO5															

Class	FYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
-------	---------------	-----------------	------------------	--	--	--	--	--	--	--	--	--	------	--	--

Subject Code	BCA 106	Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	LAB - II	CO1	3	3	3	3	2	2	2	2	2	2	3	3	3
Semester No	I	CO2	3	3	3	3	3	3	3	3	3	3	3	3	3
Teacher Name	Shaheen shaikh+ Nalinee Sonawane	CO3	3	3	3	3	3	3	2	2	2	2	3	3	3
Course Outcomes		CO4	3	3	3	3	2	2	3	2	3	2	0	0	0
	CO1	INSTALL OPERATING SYSTEM AND EXECUTE VARIOUS COMMANDS	CO5												
	CO2	EFFECTIVELY USE VARIOUS FEATURES OF APPLICATION SOFTWARE	Average	3.00	3.00	3.00	3.00	2.50	2.50	2.50	2.25	2.50	2.25	2.25	2.25
	CO3	CREATE AND USE SPREADSHEETS EFFECTIVELY													
	CO4	PREPARE EFFECTIVE PRESENTATION													
	CO5														

Class	FYBCA SCINECE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA201		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	COMPUTER ORGANIZATION	CO1	3	2	2	3	2	2	3	3	3	3	2	2	2
Semester No	II	CO2	2	3	2	2	2	2	3	3	3	3	2	2	2
Teacher Name	Sayyed Amrin	CO3	3.00	3.00	3.00	3.00	3.00	3.00	2.00	2.00	2.00	2.00	3.00	3.00	3.00
Course Outcomes		CO4	2	2	2	2	2	2	2	2	2	2	2	2	2
	CO1	THE OBJECTIVE OF THIS COURSE IS TO PROVIDE A BROAD OVERVIEW OF ARCHITECTURE AND FUNCTIONING OF COMPUTER SYSTEMS AND TO LEARN THE BASIC CONCEPTS BEHIND THE ARCHITECTURE AND ORGANIZATION OF COMPUTERS.	CO5												
	CO2	DESIGN OF COMBINATIONAL CIRCUITS	Average	2.50	2.50	2.25	2.50	2.25	2.25	2.50	2.50	2.50	2.25	2.25	2.25
	CO3	DESIGN OF SEQUENTIAL CIRCUITS													
	CO4	EXPLAIN BLOCK DIAGRAM OF CPU, MEMORY AND TYPES OF I/O TRANSFERS													
	CO5														

Class	FYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA202		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3

Subject Name	ADVANCED PROGRAMMING ON C	CO1	3	3	3	3	2	2	2	3	3	2	3	3	3	
Semester No	II	CO2	2	3	3	3	3	3	2	2	2	3	3	3	3	
Teacher Name	Suvarna Pardeshi	CO3	3	2	2	3	3	3	2	3	2	3	3	3	3	
Course Outcomes		CO4	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.00	2.00	3.00				
	CO1	THE OBJECTIVE OF THIS COURSE IS TO STUDY THE ADVANCED PROGRAMMING IN C.	CO5	2	2	2	2	2	2	2	2	2	2	2	2	
	CO2	WRITE PROGRAMS USING POINTERS, STRUCTURES AND UNIONS	Average	2.60	2.60	2.60	2.80	2.60	2.60	2.20	2.40	2.20	2.60	2.75	2.75	2.75
	CO3	USE PRE-PROCESSOR DIRECTIVES														
	CO4	MANIPULATE STRINGS USING LIBRARY FUNCTIONS														
	CO5	WRITE PROGRAMS TO PERFORM OPERATIONS ON FILES														

Class	FYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA203		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	APPLIED MATHEMATICS - II	CO1	3	3	3	3	3	3	3	3	3	3	2	2	2
Semester No	II	CO2											2	2	2
Teacher Name	Namrata Mahankale	CO3											2	2	2
Course Outcomes		CO4													
	CO1	THE OBJECTIVE OF THIS COURSE IS TO STUDY THE APPLIED MATHEMATICS.	CO5												
	CO2		Average	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.00	2.00	2.00
	CO3														
	CO4														
	CO5														

Class	FYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA204		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	RELATIONL DATABASE MANAGEMENT SYSTEM	CO1	3	2	2	3	2	2	3	3	3	3	2	2	2
Semester No	II	CO2	2	3	2	2	2	2	3	3	3	3	2	2	2
Teacher Name	Sayed Aamera	CO3	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Course Outcomes		CO4	2	2	2	2	2	2	2	2	2	2	2	2	2

	CO1	THE OBJECTIVE OF THIS COURSE IS TO STUDY THE BASICS DBMS AND TO LEARN SQL.	CO5													
	CO2	PREPARE E-R DIAGRAM FOR THE GIVEN PROBLEM STATEMENT	Average	2.25	2.25	2.00	2.25	2.00	2.00	2.50	2.50	2.50	2.50	2.00	2.00	2.00
	CO3	FORMULATE APPROPRIATE SQL DDL QUERIES														
	CO4	FORMULATE APPROPRIATE SQL DML QUERIES														
	CO5															

Class		FYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA205			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	LAB - I		CO1	2	2	2	2	2	2	2	2	2	3	3	3	
Semester No	II		CO2	3	3	3	2	2	2	2	3	3	3	3	3	
Teacher Name	Sonawane Nalinee		CO3	2	2	2	2	2	2	2	3	3	3	2	2	2
Course Outcomes			CO4													
	CO1	INSTALL LINUX AND PACKAGES, CONFIGURE ENVIROMENT	CO5													
	CO2	USE COMMANDS AND EDITORS AND USE DOCUMENTATION	Average	2.33	2.33	2.33	2.00	2.00	2.00	2.00	2.67	2.67	2.67	2.67	2.67	2.67
	CO3	CONFIGURE SECURITY AND NETWORK ENVIRONMENT														
	CO4															
	CO5															

Class		FYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA206			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	LAB - II		CO1	2	2	2	2	2	2	2	2	2	3	3	3	
Semester No	II		CO2	3	3	3	2	2	2	2	3	3	3	3	3	
Teacher Name	Sayyed Aamera		CO3	2	2	2	2	2	2	2	3	3	3	2	2	2
Course Outcomes			CO4													
	CO1	INSTALL LINUX AND PACKAGES, CONFIGURE ENVIROMENT	CO5													
	CO2	USE COMMANDS AND EDITORS AND USE DOCUMENTATION	Average	2.33	2.33	2.33	2.00	2.00	2.00	2.00	2.67	2.67	2.67	2.67	2.67	2.67
	CO3	CONFIGURE SECURITY AND NETWORK ENVIRONMENT														
	CO4															

	CO5	
--	-----	--

Academic Year :	2018-19
------------------------	----------------

Class		SYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA301			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	DATA STRUCTURES		CO1	3	3	3	3	3	3	3	3	3	3	3	3	3
Semester No	III		CO2	3	3	3	3	3	3	3	3	3	3	3	3	3
Teacher Name	Monika Galbote		CO3	2	2	2	2	2	2	2	2	2	2	2	2	2
Course Outcomes			CO4													
	CO1	TO STUDY THE VARIOUS STRUCTURES OR METHODS OF ORGANIZING DATA IN COMPUTER'S MEMORY AND EFFICIENTLY IMPLEMENT THEM.	CO5													
	CO2	Design an efficient algorithm for the given problem	Average	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67
	CO3	Determine the time and space complexity of a given algorithm														
	CO4															
	CO5															

Class		SYBCA SICENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA302			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	ADVANCED RELATIONAL DATABASE MANAGEMENT		CO1	3	2	2	2	2	2	2	2	2	2	2	2	2
Semester No	III		CO2	3	2	3	3	2	3	3	2	3	2	3	3	3
Teacher Name	Suvarna Pardeshi		CO3	3	2	2	2	2	2	3	2	2	3	2	2	2
Course Outcomes			CO4	3	3	3	3	3	3	3	3	3				
	CO1	TO STUDY FUNDAMENTAL CONCEPTS OF RDBMS (PL/PGSQL)	CO5													
	CO2	TO STUDY DATABASE MANAGEMENT OPERATIONS	Average	3.00	2.25	2.50	2.50	2.25	2.50	2.75	2.25	2.50	2.50	2.33	2.33	2.33

	CO3	TO STUDY DATA SECURITY AND ITS IMPORATNCE.
	CO4	TO STUDY CLIENT SERVER ARCHITECTURE
	CO5	

Class		SYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	Subject Name	Semester No	Teacher Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
BCA303	SOFTWARE ENGINEERING	III	Nalinee Sonawane	3	2	3	2	3	2	3	2	3	2	3	3	3
				3	2	3	3	3	2	2	3	2	3	2	2	2
				3	2	2	2	3	2	3	2	3	3	3	3	3
				3	2	2	2	3	3	2	2	2	3			
	CO1	THE OBJECTIVE OF THIS COURSE IS TO UNDERSTAND SYSTEM CONCEPTS, TO KNOW ABOUT SOFTWARE ENGINEERING AND ITS APPLICATION IN SOFTWARE DEVELOPMENT	CO5													
	CO2	Classify software applications and Identify unique features of various domains	Average	3.00	2.00	2.50	2.25	3.00	2.25	2.50	2.25	2.50	2.75	2.67	2.67	2.67
	CO3	Prepare System Requirement Specification (SRS) for the given problem														
	CO4	Design and analyze Data Flow diagrams														
	CO5															

Class		SYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	Subject Name	Semester No	Teacher Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
BCA304	COMPUTER NETWORK	III	Nivedita Waghmare	2	2	2	2	2	2	2	2	2	3	2	3	3
				3	3	3	3	3	3	2	2	2	3	3	3	3
				3	3	3	3	3	2	2	2	3	2	3	2	2
				2	2	2	2	2	2	2	2	2	2			
	CO1	TO PREPARE STUDENTS WITH BASIC NETWORKING CONCEPTS: DATA COMMUNICATION, PROTOCOLS AND STANDARDS, VARIOUS TOPOLOGIES AND APPLICATIONS OF NETWORK.	CO5													
	CO2	Analyze data flow between TCP/IP model using Application, Transport and Network Layer Protocols	Average	2.50	2.50	2.50	2.50	2.50	2.25	2.00	2.00	2.25	2.50	2.67	2.67	2.67

	CO3	Illustrate applications of Computer Network
	CO4	Compare and contrast different routing and switching algorithms
	CO5	

Class		SYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA305			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	LAB COURSE I (DATA STRUCTURES)		CO1	2	2	2	3	3	2	2	3	2	3	3	3	2
Semester No	III		CO2	3	3	3	3	2	2	3	2	3	3	2	2	3
Teacher Name	Monika Galbote+Madhavi Dethe		CO3	2	2	2	3	3	3	2	2	2	2	3	3	3
Course Outcomes			CO4													
	CO1	Apply appropriate data structures for the given problem	CO5													
	CO2	Design an efficient algorithm for the given problem and implement it using C Programming	Average	2.33	2.33	2.33	3.00	2.67	2.33	2.33	2.33	2.33	2.67	2.67	2.67	2.67
	CO3	Determine the time and space complexity of a given algorithm														
	CO4															
	CO5															

Class		SYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA306			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	LAB COURSE II		CO1	3	3	3	3	2	2	2	2	2	2	3	3	3
Semester No	III		CO2	2	2	2	2	3	2	2	2	2	3	3	2	2
Teacher Name	Nivedita Waghmare		CO3	3	3	3	3	2	2	3	3	3	3	3	3	3
Course Outcomes			CO4													
	CO1	Formulate SQL queries using advanced features	CO5													
	CO2	Write stored procedures, cursors and triggers using PL/Postgre SQL.	Average	2.67	2.67	2.67	2.67	2.33	2.00	2.33	2.33	2.33	2.67	3.00	2.67	2.67
	CO3	Design a database using database normalization technique														
	CO4															
	CO5															

Class	SYBCA SCIENCE	Course	Program Outcomes										PSOs		
-------	---------------	--------	------------------	--	--	--	--	--	--	--	--	--	------	--	--

Subject Code	BCA401	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	C++	CO1	3	3	3	3	3	3	3	3	3	3	3	3	3
Semester No	IV	CO2	3	3	3	3	3	3	3	3	3	3	3	3	3
Teacher Name	Suvarna Pareshi	CO3	2	2	2	2	2	2	2	2	2	2	3	3	3
Course Outcomes		CO4													
	CO1	BE ABLE TO EXPLAIN THE DIFFERENCE BETWEEN OBJECT ORIENTED PROGRAMMING AND PROCEDURAL PROGRAMMING.	CO5												
	CO2	BE ABLE TO PROGRAM USING C++ FEATURES SUCH AS CLASS, OBJECTS, OPERATOR OVERLOADS, DYNAMIC MEMORY ALLOCATION, INHERITANCE AND POLYMORPHISM, FILE I/O, EXCEPTION HANDLING, ETC.	Average	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	3.00	3.00	3.00
	CO3	BE ABLE TO BUILD C++ CLASSES USING APPROPRIATE ENCAPSULATION AND DESIGN PRINCIPLES.													
	CO4														
	CO5														

Class	SYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA402	Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	INTRODUCTION TO WEB TECHNOLOGY	CO1	3	3	3	3	2	2	2	3	2	3	2	2	2
Semester No	IV	CO2	3	3	3	3	3	2	2	3	3	2	3	3	3
Teacher Name	Shaikh Shaheen	CO3	2	2	2	3	3	2	2	2	2	3	2	2	2
Course Outcomes		CO4													
	CO1	Develop web based application using suitable client side and server side web technologies.	CO5												
	CO2	Build Dynamic web site using server side PHP Programming and Database connectivity.	Average	2.67	2.67	2.67	3.00	2.67	2.00	2.00	2.67	2.33	2.67	2.33	2.33
	CO3	Build applications using AJAX and XML													
	CO4														
	CO5														

Class		SYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA403			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	ADVANCED NETWORKING AND NETWORK SECURITY		CO1	3	3	3	3	3	3	2	3	2	3	3	3	3
Semester No	IV		CO2	2	3	3	3	2	3	3	3	3	2	2	2	
Teacher Name	Nivedita Waghmare		CO3	3	2	3	2	3	1	1	2	2	2	3	3	3
Course Outcomes			CO4	3	3	2	3	3	2	2	2	2	3			
	CO1	Understand advanced concepts and next generation networks	CO5													
	CO2	Analyze TCP/IP variants, network Algorithm's, Protocols and their functionalities	Average	2.75	2.75	2.75	2.75	2.75	2.25	2.00	2.50	2.25	2.75	2.67	2.67	2.67
	CO3	Comprehend features of SDN and its application to next generation systems														
	CO4	Analyze the performance of various server implementations														
	CO5															

Class		SYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA404			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	OOSE		CO1	3	2	3	2	3	2	2	1	2	3	3	3	3
Semester No	IV		CO2	3	3	2	3	2	2	3	2	3	2	2	3	3
Teacher Name	Monika Galbote		CO3	3	2	2	3	2	3	2	3	2	3	3	3	3
Course Outcomes			CO4													
	CO1	Understand the concepts of software engineering	CO5													
	CO2	Illustrate the various development activities	Average	3.00	2.33	2.33	2.67	2.33	2.33	2.33	2.00	2.33	2.67	2.67	3.00	3.00
	CO3	Outline the concepts of modelling with UML														
	CO4															
	CO5															

Class		SYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA405			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	LAB I(C++ PRACTICAL)		CO1	3	2	3	3	3	3	2	2	2	1	3	3	3
Semester No	IV		CO2	3	3	3	2	2	3	3	3	3	2	3	3	3
Teacher Name	Pardeshi Suvarna		CO3	3	3	3	2	3	3	3	3	3	3	3	3	3
Course Outcomes			CO4													

	CO1	Compare and contrast procedural and object oriented programming	CO5													
	CO2	Apply principles of OOP	Average	3.00	2.67	3.00	2.33	2.67	3.00	2.67	2.67	2.67	2.00	3.00	3.00	3.00
	CO3	Design and develop applications using object oriented programming language C++														
	CO4															
	CO5															

Class		SYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA406			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	LAB II(WEB TECHNOLOGY)		CO1	3	3	2	2	2	3	3	3	3	3	3	3	3
Semester No	IV		CO2	2	2	3	3	3	3	2	2	2	3	3	3	3
Teacher Name	Shaikh Shaheen		CO3	3	3	3	3	3	3	2	2	2	3	3	3	3
Course Outcomes			CO4													
	CO1	Design and implement static and dynamic websites using appropriate client side and server side technologies.	CO5													
	CO2	Build Dynamic web site using PHP Programming and Database connectivity.	Average	2.67	2.67	2.67	2.67	2.67	3.00	2.33	2.33	2.33	3.00	3.00	3.00	3.00
	CO3	Build applications using AJAX and XML and web services.														
	CO4															
	CO5															

Class		SYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA407			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	GRID AND CLOUD COMPUTING		CO1	2	2	2	2	2	2	3	3	3	3	2	2	2
Semester No	IV		CO2	3	3	3	3	3	3	3	3	3	3	2	2	2
Teacher Name	Khandagale Priyanka		CO3	2	2	2	2	2	2	2	2	2	2	2	2	2
Course Outcomes			CO4													
	CO1	Identify the technical foundations of cloud systems architectures	CO5													
	CO2	Analyze the problems and solutions to cloud application problems	Average	2.33	2.33	2.33	2.33	2.33	2.33	2.67	2.67	2.67	2.67	2.00	2.00	2.00
	CO3	Apply principles of best practice in cloud application design and management														
	CO4															
	CO5															

Academic Year :	2018-19
------------------------	----------------

Class		TYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA501			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	JAVA PROGRAMMING		CO1	2	2	2	2	2	2	2	2	2	3	3	3	
Semester No	V		CO2	3	3	3	2	2	2	2	3	3	3	3	3	
Teacher Name	Suvarna Pardeshi		CO3	2	2	2	2	2	2	2	3	3	2	2	2	
Course Outcomes			CO4													
	CO1	TO UNDERSTAND FUNDAMENTALS OF OBJECT-ORIENTED PROGRAMMING IN JAVA, INCLUDING DEFINING CLASSES, INVOLVING METHODS, USING CLASS LIBRARIESS, ETC.	CO5													
	CO2	TO HANDLE ABNORMAL TERMINATION OF A PROGRAM USING EXCEPTION HANDLING	Average	2.33	2.33	2.33	2.00	2.00	2.00	2.00	2.67	2.67	2.67	2.67	2.67	
	CO3	TO USE THE JAVA SDK ENVIRONMENT TO CREATE, DEBUG AND RUN SIMPLE JAVA PROGRAM														
	CO4															
	CO5															

Class		TYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA502			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	ADVANCED WEB TECHNOLOGY		CO1	2	1	2	1	1	2	2	2	1	1	2	2	2
Semester No	V		CO2	2	2	1	1	1	1	2	1	2	1	3	3	3
Teacher Name	Monika Galbote		CO3	2	2	2	2	1	1	2	1	1	1	3	2	2
Course Outcomes			CO4	1	1	2	1	1	2	1	1	1	1			
	CO1	TO KNOW AND UNDERSTAND CONCEPTS OF INTERNET PROGRAMMING	CO5													
	CO2	Design and implement static and dynamic websites using appropriate client side and server side technologies.	Average	1.75	1.50	1.75	1.25	1.00	1.50	1.75	1.25	1.25	1.00	2.67	2.33	2.33

	CO3	Build Dynamic web site using PHP Programming and Database connectivity.
	CO4	Build applications using AJAX and XML and web services.
	CO5	

Class		TYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	Subject Name	Semester No		Teacher Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2
BCA503	SOFTWARE QUALITY ASSURANCE	V	Sayyed Aamera	CO1	2	2	2	2	2	2	2	2	2	3	3	3
				CO2	3	3	3	3	3	3	3	3	3	3	3	3
				CO3	2	2	2	2	2	2	2	2	2	3	3	3
				CO4												
				CO5												
				Average	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	3.00	3.00	3.00
	CO1	TO UNDERSTAND THE BASIC OF QUALITY SOFTWARE AND QUALITY FACTORS.														
	CO2	TO UNDERSTAND SOFTWARE QUALITY ARCHITECTURE AND COMPONENT.														
	CO3	TO UNDERSTAND SOFTWARE PROJECT LIFE CYCLE, INFRASTRUCTURE AND SOFTWARE QUALITY STANDARDS.														
	CO4															
	CO5															

Class		TYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	Subject Name	Semester No		Teacher Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2
BCA504	OPERATING SYSTEMS	V	Nivedita Waghmare	CO1	2	2	2	2	2	2	2	2	2	3	3	3
				CO2	3	3	3	3	3	3	3	3	3	3	3	3
				CO3	3	3	3	3	3	3	3	3	3	3	3	3
				CO4	2	2	2	3	2	2	2	2	2			
				CO5	2	2	2	2	2	2	2	2	2			
	CO1	TO UNDERSTAND THE OBJECTIVES, STRUCTURE AND FUNCTOINS OF OPERATING SYSTEM														
	CO2	TO LEARN ABOUT CONCEPT OF PROCESSES, THREADS AND ITS SCHEDULING ALGORITHMS.														
	CO3	TO UNDERSTAND DESIGN ISSUES IN PROCESS SYNCHRONIZATION AND DEADLOCK MANAGEMENT.														
				Average	2.40	2.40	2.40	2.60	2.40	2.40	2.40	2.40	2.40	3.00	3.00	3.00

CO4	TO STUDY VARIOUS MEMORY MANAGEMENT SCHEMES.
CO5	TO LEARN ABOUT CONCEPT FILE AND I/O MANAGEMENT IN DETAIL.

Class		TYBCA SCIENCE		Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA505	PO1	PO2		PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3		
Subject Name	LAB I(CORE JAVA)	CO1	3	3	3	3	3	3	3	3	3	3	3	3	3		
Semester No	V	CO2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Teacher Name	Suvarna Pardeshi	CO3	3	3	3	3	3	3	3	3	3	3	3	3	3		
Course Outcomes		CO4															
	CO1	Gain understanding of Object oriented programming concepts using Java	CO5														
	CO2	Understand, design, implement and evaluate classes and applets	Average	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67		
	CO3	Students Acquire Knowledge about the concepts of GUI controls and designing GUI applications															
	CO4																
	CO5																

Class		TYBCA SCIENCE		Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA506	PO1	PO2		PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3		
Subject Name	LAB II(ADV. WEB TECHNOLOGY)	CO1	3	3	3	3	3	3	3	3	3	3	3	3			
Semester No	V	CO2	2	2	2	2	2	2	2	2	2	2	2	2			
Teacher Name	Monika Galbote	CO3	3	3	3	3	3	3	3	3	3	3	3	3			
Course Outcomes		CO4															
	CO1	Design and implement static and dynamic websites using appropriate client side and server side technologies.	CO5														
	CO2	Build Dynamic web site using PHP Programming and Database connectivity.	Average	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67			
	CO3	Build applications using AJAX and XML and web services.															
	CO4																
	CO5																

Class		TYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA507			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	SOFT COMPUTING		CO1	2	2	2	2	2	2	2	2	2	2	3	3	3
Semester No	V		CO2	2	2	2	2	2	2	2	2	2	2	2	2	2
Teacher Name	Shaheen Shaikh		CO3											2	2	2
Course Outcomes			CO4													
	CO1	TO LEARN THE CONCEPT OF SOFT COMPUTING.	CO5													
	CO2	UNDERSTAND DIFFERENT SOFT COMPUTING TECHNIQUES LIKE GENETIC ALGORITHMS, FUZZY LOGIC, NEURAL NETWORKS AND THEIR COMBINATIONS.	Average	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.33	2.33	2.33
	CO3															
	CO4															
	CO5															

Class		TYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA601			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	ANDROID PROGRAMMING		CO1	2	2	2	2	2	2	2	2	2	2	3	3	3
Semester No	VI		CO2	2	2	2	2	2	2	2	2	2	2	3	3	3
Teacher Name	Galbote Monika		CO3	2	2	2	2	2	2	2	2	2	2	3	3	3
Course Outcomes			CO4	2	2	2	2	2	2	2	2	2	2			
	CO1	THE OBJECTIVE OF THIS COURSE IS TO UNDERSTAND THE OPERATING SYSTEM AND DEVEOP APPLICATIONS USING GOOGLE'S ANDROID OPEN-SOURECE PLATFORM.	CO5	2	2	2	2	2	2	2	2	2	2			
	CO2	Describe the process of developing mobile applications.	Average	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	3.00	3.00	3.00
	CO3	Create mobile applications on the Android Platform														
	CO4	Design and implement mobile applications involving data storage in SQLite database														
	CO5	Use location-based services while developing applications														

Class		TYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA602			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3

Subject Name	PYTHON PROGRAMMING		CO1	3	3	3	3	3	3	3	3	3	3	3	3
Semester No	VI		CO2	2	2	2	2	2	2	2	2	2	2	3	3
Teacher Name	Waghmare Nivedita		CO3											3	3
Course Outcomes			CO4												
	CO1	TO INTRODUCE VARIOUS CONCEPTS OF PROGRAMMING TO THE STUDENTS USING PYTHON.	CO5												
	CO2	STUDENTS SHOULD BE ABLE TO APPLY THE PROBLEM SOLVING SKILLS USING PYTHON.	Average	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	3.00	3.00
	CO3														
	CO4														
	CO5														

Class	TYBCA SCIENCE		Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA603			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	TRECENT TRENDS IN IT (INTERNET OF THINGS)		CO1	3	2	3	2	3	2	3	2	3	2	3	3	3
Semester No	VI		CO2	2	3	2	3	2	3	2	3	2	3	3	3	3
Teacher Name	Sayyed Kulsum		CO3	3	2	3	2	3	2	3	2	3	2	2	2	2
Course Outcomes			CO4	2	3	2	3	2	3	2	3	2	3			
	CO1	THE INTERNET OF THINGS(IOT) IS AIMED AT ENABLING THE INTERCONNECION AND INTERGRATION OF THE PHYSICAL WORLD AND THE CYBER SPACE.	CO5	3	2	3	2	3	2	3	2	3	2			
	CO2	TO LEARN ABOUT SOC ARCHITECTURES, PROGRAMMING RASPBERRY Pi AND IMPLEMENTATION OF INTERNET OF HINGS AND PROTOCOLS	Average	2.60	2.40	2.60	2.40	2.60	2.40	2.60	2.40	2.60	2.40	2.67	2.67	2.67
	CO3	Design simple IoT applications														
	CO4	Analyze protocols for communication among IoT devices														
	CO5	Describe cloud-based IoT systems														

Class	TYBCA SCIENCE		Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA604			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	DATA ANALYICS		CO1	3	2	3	2	3	2	3	2	3	2	3	3	3

Semester No	VI	CO2	2	3	2	3	2	3	2	3	2	3	3	3	3	
Teacher Name	Shinde Snehal	CO3											2	2	2	
Course Outcomes		CO4														
	CO1	ABE TO APPY FUNDAMENTAL ALGORITMIC IDEAS TO PROCESS DATA.	CO5													
	CO2	LEARN TO APPY HYPOTHESES AND DATA INTO ACTIONABLE PREDICTION.	Average	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.67	2.67	2.67
	CO3															
	CO4															
	CO5															

Class	TYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA605		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	ANDROID PROGRAMMING LAB	CO1	2	3	2	3	2	3	3	2	3	3	3	3	3
Semester No	VI	CO2	2	3	2	2	3	2	2	3	2	2	3	3	3
Teacher Name	Galbote Monika	CO3	2	3	2	3	2	3	3	2	3	3	3	3	3
Course Outcomes		CO4	2	3	2	2	3	2	2	3	2	2			
	CO1	Describe the process of developing mobile applications	CO5												
	CO2	Create mobile applications on the Android Platform	Average	2.00	3.00	2.00	2.50	2.50	2.50	2.50	2.50	2.50	3.00	3.00	3.00
	CO3	Design and implement mobile applications involving data storage in SQLite database													
	CO4	Use location-based services while developing applications													
	CO5														

Class	TYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA606		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	PYTHON LAB COURSE II	CO1	2	2	2	2	2	2	2	2	2	2	3	3	3
Semester No	VI	CO2	2	2	2	2	2	2	2	2	2	2	3	3	3
Teacher Name	Waghmare Nivedita	CO3											2	2	2
Course Outcomes		CO4													
	CO1	To understand the basic concepts and techniques of Machine Learning through python programming.	CO5												
	CO2	To develop skills of using recent machine learning packages for solving practical problems	Average	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.67	2.67	2.67
	CO3														

	CO4	
	CO5	

Class		TYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code	BCA607			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	INTRODUCTION TO GREEN COMPUTING		CO1	3	3	3	3	3	3	3	3	3	3	3	3	
Semester No	VI		CO2	3	3	3	3	3	3	3	3	3	3	3	3	
Teacher Name	Shaikh Shaheen		CO3	2	2	2	2	2	2	2	2	2	2	2	2	
Course Outcomes			CO4													
	CO1	A HOLISTIC COVERAGE IS GIVEN RANGING FROM SINGLE DEVICE ISSUES TO ALGORITHMS FOR REDUCING POWER CONSUMPTION OF DATA CENTERS, TRANSPORTATION SYSTEMS, AND SMART BUILDINGS.	CO5													
	CO2	Acquire knowledge to adopt green computing practices to minimize negative impacts on the environment	Average	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	
	CO3	Enhance the skill in energy saving practices in their use of hardware														
	CO4															
	CO5															

CO-PO Mapping

		Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	
FY	FY	1	BCA101	2.75	2.50	2.50	2.00	2.00	2.25	2.50	2.00	2.75	2.00
		2	BCA102	2.50	2.75	2.75	3.00	3.00	2.75	2.50	2.25	2.75	2.75
		3	BCA103	2.40	2.60	2.60	2.80	2.80	2.60	2.40	2.20	2.60	2.60
		4	BCA104	2.50	2.75	2.25	2.75	3.00	2.50	2.50	2.50	3.00	2.50
		5	BCA105	3.00	3.00	3.00	3.00	2.67	2.67	2.00	2.00	2.33	2.67
		6	BCA 106	3.00	3.00	3.00	3.00	2.50	2.50	2.50	2.25	2.50	2.25
		7	BCA201	2.50	2.50	2.25	2.50	2.25	2.25	2.50	2.50	2.50	2.50
		8	BCA202	2.60	2.60	2.60	2.80	2.60	2.60	2.20	2.40	2.20	2.60
		9	BCA203	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
		10	BCA204	2.25	2.25	2.00	2.25	2.00	2.00	2.50	2.50	2.50	2.50
		11	BCA205	2.33	2.33	2.33	2.00	2.00	2.00	2.00	2.67	2.67	2.67
		12	BCA206	2.33	2.33	2.33	2.00	2.00	2.00	2.00	2.67	2.67	2.67
SY	SY	1	BCA301	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67
		2	BCA302	3.00	2.25	2.50	2.50	2.25	2.50	2.75	2.25	2.50	2.50
		3	BCA303	3.00	2.00	2.50	2.25	3.00	2.25	2.50	2.25	2.50	2.75
		4	BCA304	2.50	2.50	2.50	2.50	2.50	2.25	2.00	2.00	2.25	2.50
		5	BCA305	2.33	2.33	2.33	3.00	2.67	2.33	2.33	2.33	2.33	2.67
		6	BCA306	2.67	2.67	2.67	2.67	2.33	2.00	2.33	2.33	2.33	2.67
		7	BCA401	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67
		8	BCA402	2.67	2.67	2.67	3.00	2.67	2.00	2.00	2.67	2.33	2.67
		9	BCA403	2.75	2.75	2.75	2.75	2.75	2.25	2.00	2.50	2.25	2.75
		10	BCA404	3.00	2.33	2.33	2.67	2.33	2.33	2.33	2.00	2.33	2.67
		11	BCA405	3.00	2.67	3.00	2.33	2.67	3.00	2.67	2.67	2.67	2.00
		12	BCA406	2.67	2.67	2.67	2.67	2.67	3.00	2.33	2.33	2.33	3.00
	SY	13	BCA407	2.33	2.33	2.33	2.33	2.33	2.33	2.67	2.67	2.67	2.67
TY	TY	1	BCA501	2.33	2.33	2.33	2.00	2.00	2.00	2.00	2.67	2.67	2.67
		2	BCA502	1.75	1.50	1.75	1.25	1.00	1.50	1.75	1.25	1.25	1.00
		3	BCA503	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33
		4	BCA504	2.40	2.40	2.40	2.60	2.40	2.40	2.40	2.40	2.40	2.40
		5	BCA505	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67
		6	BCA506	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67
		7	BCA507	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
		8	BCA601	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
		9	BCA602	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
		10	BCA603	2.60	2.40	2.60	2.40	2.60	2.40	2.60	2.40	2.60	2.40
		11	BCA604	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
		12	BCA605	2.00	3.00	2.00	2.50	2.50	2.50	2.50	2.50	2.50	2.50
		13	BCA606	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
		14	BCA607	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67

CO-PO ATTAINMENT									
PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
0.55	0.5	0.5	0.4	0.4	0.45	0.5	0.4	0.55	0.4
0.5	0.55	0.55	0.6	0.6	0.55	0.5	0.45	0.55	0.55
0.48	0.52	0.52	0.56	0.56	0.52	0.48	0.44	0.52	0.52
0.5	0.55	0.45	0.55	0.6	0.5	0.5	0.5	0.6	0.5
0.6	0.6	0.6	0.6	0.533333	0.533333	0.4	0.4	0.466667	0.533333
1.4	1.4	1.4	1.4	1.166667	1.166667	1.166667	1.05	1.166667	1.05
1.3	1.3	1.17	1.3	1.17	1.17	1.3	1.3	1.3	1.3
1.352	1.352	1.352	1.456	1.352	1.352	1.144	1.248	1.144	1.352
2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04
1.53	1.53	1.36	1.53	1.36	1.36	1.7	1.7	1.7	1.7
1.586667	1.586667	1.586667	1.36	1.36	1.36	1.36	1.813333	1.813333	1.813333
1.586667	1.586667	1.586667	1.36	1.36	1.36	1.36	1.813333	1.813333	1.813333
0.533333	0.533333	0.533333	0.533333333	0.533333	0.533333	0.533333	0.533333	0.533333	0.533333
0.92	0.69	0.766667	0.766666667	0.69	0.766667	0.843333	0.69	0.766667	0.766667
0.6	0.4	0.5	0.45	0.6	0.45	0.5	0.45	0.5	0.55
0.5	0.5	0.5	0.5	0.5	0.45	0.4	0.4	0.45	0.5
2.333333	2.333333	2.333333	3	2.666667	2.333333	2.333333	2.333333	2.333333	2.666667
2.666667	2.666667	2.666667	2.666666667	2.333333	2	2.333333	2.333333	2.333333	2.666667
1.813333	1.813333	1.813333	1.813333333	1.813333	1.813333	1.813333	1.813333	1.813333	1.813333
2.24	2.24	2.24	2.52	2.24	1.68	1.68	2.24	1.96	2.24
0.843333	0.843333	0.843333	0.843333333	0.843333	0.69	0.613333	0.766667	0.69	0.843333
0.92	0.715556	0.715556	0.817777778	0.715556	0.715556	0.715556	0.613333	0.715556	0.817778
2.36	2.097778	2.36	1.835555556	2.097778	2.36	2.097778	2.097778	2.097778	1.573333
1.671111	1.671111	1.671111	1.671111111	1.671111	1.88	1.462222	1.462222	1.462222	1.88
1.088889	1.088889	1.088889	1.088888889	1.088889	1.088889	1.244444	1.244444	1.244444	1.244444
1.213333	1.213333	1.213333	1.04	1.04	1.04	1.04	1.386667	1.386667	1.386667
0.536667	0.46	0.536667	0.383333333	0.306667	0.46	0.536667	0.383333	0.383333	0.306667
0.466667	0.466667	0.466667	0.466666667	0.466667	0.466667	0.466667	0.466667	0.466667	0.466667
1.248	1.248	1.248	1.352	1.248	1.248	1.248	1.248	1.248	1.248
2.666667	2.666667	2.666667	2.666666667	2.666667	2.666667	2.666667	2.666667	2.666667	2.666667
2.666667	2.666667	2.666667	2.666666667	2.666667	2.666667	2.666667	2.666667	2.666667	2.666667
2	2	2	2	2	2	2	2	2	2
2	2	2	2	2	2	2	2	2	2
1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
2.184	2.016	2.184	2.016	2.184	2.016	2.184	2.016	2.184	2.016
1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
2	3	2	2.5	2.5	2.5	2.5	2.5	2.5	2.5
2	2	2	2	2	2	2	2	2	2
2.097778	2.097778	2.097778	2.097777778	2.097778	2.097778	2.097778	2.097778	2.097778	2.097778

Percentage CO-PO ATTAINMENT

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
20	20	20	20	20	20	20	20	20	20
20	20	20	20	20	20	20	20	20	20
20	20	20	20	20	20	20	20	20	20
20	20	20	20	20	20	20	20	20	20
20	20	20	20	20	20	20	20	20	20
46.66667	46.66667	46.66667	46.6666667	46.66667	46.66667	46.66667	46.66667	46.66667	46.66667
52	52	52	52	52	52	52	52	52	52
52	52	52	52	52	52	52	52	52	52
68	68	68	68	68	68	68	68	68	68
68	68	68	68	68	68	68	68	68	68
68	68	68	68	68	68	68	68	68	68
68	68	68	68	68	68	68	68	68	68
20	20	20	20	20	20	20	20	20	20
30.66667	30.66667	30.66667	30.6666667	30.66667	30.66667	30.66667	30.66667	30.66667	30.66667
20	20	20	20	20	20	20	20	20	20
20	20	20	20	20	20	20	20	20	20
100	100	100	100	100	100	100	100	100	100
100	100	100	100	100	100	100	100	100	100
68	68	68	68	68	68	68	68	68	68
84	84	84	84	84	84	84	84	84	84
30.66667	30.66667	30.66667	30.6666667	30.66667	30.66667	30.66667	30.66667	30.66667	30.66667
30.66667	30.66667	30.66667	30.6666667	30.66667	30.66667	30.66667	30.66667	30.66667	30.66667
78.66667	78.66667	78.66667	78.6666667	78.66667	78.66667	78.66667	78.66667	78.66667	78.66667
62.66667	62.66667	62.66667	62.6666667	62.66667	62.66667	62.66667	62.66667	62.66667	62.66667
46.66667	46.66667	46.66667	46.6666667	46.66667	46.66667	46.66667	46.66667	46.66667	46.66667
52	52	52	52	52	52	52	52	52	52
30.66667	30.66667	30.66667	30.6666667	30.66667	30.66667	30.66667	30.66667	30.66667	30.66667
20	20	20	20	20	20	20	20	20	20
52	52	52	52	52	52	52	52	52	52
100	100	100	100	100	100	100	100	100	100
100	100	100	100	100	100	100	100	100	100
100	100	100	100	100	100	100	100	100	100
100	100	100	100	100	100	100	100	100	100
52	52	52	52	52	52	52	52	52	52
84	84	84	84	84	84	84	84	84	84
52	52	52	52	52	52	52	52	52	52
100	100	100	100	100	100	100	100	100	100
100	100	100	100	100	100	100	100	100	100
78.66667	78.66667	78.66667	78.6666667	78.66667	78.66667	78.66667	78.66667	78.66667	78.66667

CO-PSO MAPPING

CO-PSO ATTAINMENT

Percentage CO-PSO ATTAINMENT

	Course	PSO1	PSO2	PSO3
FY	1 BCA101	3.00	3.00	3.00
	2 BCA102	3.00	3.00	3.00
	3 BCA103	2.80	2.80	2.80
	4 BCA104	2.25	2.25	2.25
	5 BCA105	3.00	3.00	3.00
	6 BCA 106	2.25	2.25	2.25
	7 BCA201	2.25	2.25	2.25
	8 BCA202	2.75	2.75	2.75
	9 BCA203	2.00	2.00	2.00
	10 BCA204	2.00	2.00	2.00
	11 BCA205	2.67	2.67	2.67
	12 BCA206	2.67	2.67	2.67
SY	1 BCA301	2.67	2.67	2.67
	2 BCA302	2.33	2.33	2.33
	3 BCA303	2.67	2.67	2.67
	4 BCA304	2.67	2.67	2.67
	5 BCA305	2.67	2.67	2.67
	6 BCA306	3.00	2.67	2.67
	7 BCA401	3.00	3.00	3.00
	8 BCA402	2.33	2.33	2.33
	9 BCA403	2.67	2.67	2.67
	10 BCA404	2.67	3.00	3.00
	11 BCA405	3.00	3.00	3.00
	12 BCA406	3.00	3.00	3.00
	13 BCA407	2.00	2.00	2.00
TY	1 BCA501	2.67	2.67	2.67
	2 BCA502	2.67	2.33	2.33
	3 BCA503	3.00	3.00	3.00
	4 BCA504	3.00	3.00	3.00
	5 BCA505	3.00	3.00	3.00
	6 BCA506	2.33	2.33	2.33
	7 BCA507	2.33	2.33	2.33
	8 BCA601	3.00	3.00	3.00
	9 BCA602	3.00	3.00	3.00
	10 BCA603	2.67	2.67	2.67
	11 BCA604	2.67	2.67	2.67
	12 BCA605	3.00	3.00	3.00
	13 BCA606	2.67	2.67	2.67
14 BCA607	2.67	2.67	2.67	

Course	PSO1	PSO2	PSO3
BCA101	0.6	0.6	0.6
BCA102	0.6	0.6	0.6
BCA103	0.56	0.56	0.56
BCA104	0.45	0.45	0.45
BCA105	0.6	0.6	0.6
BCA 106	1.05	1.05	1.05
BCA201	1.17	1.17	1.17
BCA202	1.43	1.43	1.43
BCA203	1.36	1.36	1.36
BCA204	1.36	1.36	1.36
BCA205	1.813333	1.813333	1.813333
BCA206	1.813333	1.813333	1.813333
BCA301	0.533333	0.533333	0.533333
BCA302	0.715556	0.715556	0.715556
BCA303	0.533333	0.533333	0.533333
BCA304	0.533333	0.533333	0.533333
BCA305	2.666667	2.666667	2.666667
BCA306	3	2.666667	2.666667
BCA401	2.04	2.04	2.04
BCA402	1.96	1.96	1.96
BCA403	0.817778	0.817778	0.817778
BCA404	0.817778	0.92	0.92
BCA405	2.36	2.36	2.36
BCA406	1.88	1.88	1.88
BCA407	0.933333	0.933333	0.933333
BCA501	1.386667	1.386667	1.386667
BCA502	0.817778	0.715556	0.715556
BCA503	0.6	0.6	0.6
BCA504	1.56	1.56	1.56
BCA505	3	3	3
BCA506	2.333333	2.333333	2.333333
BCA507	2.333333	2.333333	2.333333
BCA601	3	3	3
BCA602	1.56	1.56	1.56
BCA603	2.24	2.24	2.24
BCA604	1.386667	1.386667	1.386667
BCA605	3	3	3
BCA606	2.666667	2.666667	2.666667
BCA607	2.097778	2.097778	2.097778

Course	PSO1	PSO2	PSO3
BCA101	20	20	20
BCA102	20	20	20
BCA103	20	20	20
BCA104	20	20	20
BCA105	20	20	20
BCA 106	46.66667	46.66667	46.66667
BCA201	52	52	52
BCA202	52	52	52
BCA203	68	68	68
BCA204	68	68	68
BCA205	68	68	68
BCA206	68	68	68
BCA301	20	20	20
BCA302	30.66667	30.66667	30.66667
BCA303	20	20	20
BCA304	20	20	20
BCA305	100	100	100
BCA306	100	100	100
BCA401	68	68	68
BCA402	84	84	84
BCA403	30.66667	30.66667	30.66667
BCA404	30.66667	30.66667	30.66667
BCA405	78.66667	78.66667	78.66667
BCA406	62.66667	62.66667	62.66667
BCA407	46.66667	46.66667	46.66667
BCA501	52	52	52
BCA502	30.66667	30.66667	30.66667
BCA503	20	20	20
BCA504	52	52	52
BCA505	100	100	100
BCA506	100	100	100
BCA507	100	100	100
BCA601	100	100	100
BCA602	52	52	52
BCA603	84	84	84
BCA604	52	52	52
BCA605	100	100	100
BCA606	100	100	100
BCA607	78.66667	78.66667	78.66667