

Academic Year	2019-20
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**B.P.H.E. Society's
Ahmednagar College, Ahmednagar
Internal Quality Assurance Cell
CO, PO, and PSO Attainment Sheet**

Department Name	COMPUTER SCIENCE
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Program Name	BCA(SCIENCE)
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Program Outcomes(PO)

PO1	APPLY COMPUTER LITERACY OF STUDENTS AND BASIC UNDERSTANDING OF OPERATIVE SYSTEMS AND WORKING
PO2	UTILIZE KNOWLEDGE OF ORGANIZE INFORMATION EFFICIENTLY IN THE FORMS OF OUTLINES, CHARTS, ETC. BY USING
PO3	DEVELOP PROGRAMMING SKILLS TO PRESENT IDEAS EFFECTIVELY AND EFFICIENTLY IN ANDROID TECHNOLOGY.
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 DESIGNING.
PO6	SOLVE PROBLEMS(PROGRAMMING NETWORKING DATABASE AND WEB DESIGN) IN INFORMATION TECHNOLOGY
PO7	APPLY PROFESSIONAL BEHAVIOR IN PROFESSIONAL IT ENVIRONMENT RELATED TO EMPLOYABILITY.
PO8	APPLY NETWORKING TECHNOLOGIES IN INTEGRATED IT SYSTEMS IN AN IT ENVIRONMENT.
PO9	IMPART KNOWLEDGE REQUIRED FOR PLANNING, DESIGNING AND BUILDING COMPLEX APPLICATION SOFTWARE SYSTEMS
PO10	DEVELOP ENTREPRENEURSHIP SKILLS FOR CUSTOMIZED SOFTWARE SOLUTIONS FOR SMALL AND MEDIUM ENTERPRISES.
PO11	
PO12	

Program Specific Outcome(PSO)

PSO1	FUNDAMENTAL KNOWLEDGE OF COMPUTERS, COMPUTER ORGANIZATION AND C PROGRAMMING.
PSO2	KNOWLEDGE OF RELATIONAL DATABASE MANAGEMENT SYSTEM AND ADVANCED DATABASE MANAGEMENT SYSTEM.
PSO3	PRACTICAL KNOWLEDGE ON WEB TECHNOLOGIES, DATA STRUCTURES, PYTHON PROGRAMMING, ANDROID

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Class		FYBCA(SCIENCE)	Course Outcomes	Program Outcomes										PSOs		
Subject Code		BCA111		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		SONAWANE NALINEE	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	DEFINE WORKING OF COMPUTERS AND PERIPHERALS, TYPES OF SOFTWARE AND LANGUAGE	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		BCA112		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name		PROBLEM SOLVING AND C PROGRAMMING	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		PARDESHI SUVARNA	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	DEFINE ALGORITHMS AND EXPLAIN THEIR CHARACTERISTICS	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		BCA113		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name		APPLIED MATHEMATICS	CO1	2	2	2	2	3	3	2	2	2	2	3	3	3
Semester No		I	CO2	2	2	2	2	3	3	2	2	2	2	3	3	3
Teacher Name		NAMRATA MAHANKALE	CO3	2	2	2	2	3	3	2	2	2	2	3	3	3
Course Outcomes			CO4	1	1	1	1	3	3	1	1	1	1	0	0	0
	CO1	RELATE AND APPLY TECHNIQUES FOR CONSTRUCTING MATHEMATICAL PROOFS AND MAKE USE OF APPROPRIATE SET OPERATIONS, PROPOSITIONAL LOGIC TO SOLVE PROBLEMS	CO5	2	2	2	1	1	1	2	2	3	3	0	0	0
	CO2	USE FUNCTION OR RELATION MODELS TO INTERPRET ASSOCIATED RELATIONSHIPS	Average	1.80	1.80	1.80	1.60	2.60	2.60	1.80	1.80	2.00	2.00	1.80	1.80	1.80
	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)		Program Outcomes										PSOs		
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Subject Code		BCA114	Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name		BUSINESS COMMUNICATION	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		BCA115		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name		FUNDAMENTALS OF COMPUTERS LABORATORY	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		NALEENI 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	2.25
	CO3	CREATE AND USE SPREADSHEETS EFFECTIVELY														
	CO4	PREPARE EFFECTIVE PRESENTATION														
	CO5															

Class		FYBCA(SCIENCE)	Course Outcomes	Program Outcomes										PSOs		
Subject Code		BCA116		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name		C PROGRAMMING LABORATORY	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		AVHAD SONALI	CO3	3	3	3	3	3	3	2	2	2	2	3	3	3
Course Outcomes			CO4													
	CO1	FORMULATE AN ALGORITHM AND DRAW FLOWCHAARAT FOR THE GIVEN PROBLEM	CO5													
	CO2	IMPLEMENT THE GIVEN ALGORITHM IN C	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	WRITE PROGRAMS USING APPROPRIATE DATA TYPES AND CONTROL STRUCTURES IN C														
	CO4															
	CO5															

Class		FYBCA(SCIENCE)	Course Outcomes	Program Outcomes										PSOs		
Subject Code		BCA117		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name		APPLIED MATHEMATICS LABORATORY	CO1	2	2	3	3	3	3	2	2	3	3	2	2	2
Semester No		I	CO2	2	2	2	2	2	3	3	3	3	3	2	2	2
Teacher Name		SHINDE S S	CO3											3	3	3
Course Outcomes			CO4													

	CO1	APPLY MATHEMATICAL AND STATISTICAL CONCEPTS TO SOLVE PROBLEMS	CO5													
	CO2	USE R TO PERFORM STATISTICAL OPERATIONS AND DATA VISUALIZATION	Average	2.00	2.00	2.50	2.50	2.50	3.00	2.50	2.50	3.00	3.00	2.33	2.33	2.33
	CO3															
	CO4															
	CO5															

Class		FYBCA(SCIENCE)	Course Outcomes	Program Outcomes										PSOs		
Subject Code		BCA118		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name		BUSINESS COMMUNICATION LABORATORY	CO1	3	3	3	3	3	2	2	2	2	2	2	2	2
Semester No		I	CO2	2	3	2	3	2	3	2	2	2	2	2	2	2
Teacher Name		SONAWANE TEJAL	CO3	3.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	2.00	2.00	3.00	3.00	3.00
Course Outcomes			CO4	3	2	2	2	3	3	3	3	3	0	0	0	
	CO1	EFFECTIVELY LISTEN TO LECTURES, PUBLIC ANNOUNCEMENTS AND NEWS ON TV AND RADIO.	CO5	3	3	3	3	3	3	3	3	3	0	0	0	
	CO2	ENGAGE IN TELEPHONIC CONVERSATION	Average	2.80	2.60	2.40	2.80	2.60	2.60	2.40	2.40	2.40	2.40	1.40	1.40	1.40
	CO3	COMMUNICATE EFFECTIVELY AND ACCURATELY IN ENGLISH														
	CO4	USE SPOKEN LANGUAGE FOR VARIOUS PURPOSES														
	CO5	DEMONSTRATE ABILITY TO PREPARE DOCUMENTS USED IN BUSINESS CORRESPONDENCE														

Class		FYBCA(SCIENCE)	Course Outcomes	Program Outcomes										PSOs		
Subject Code		BCA121		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	2	2	2	
Semester No		II	CO2	2	3	2	2	2	2	3	3	3	2	2	2	

Teacher Name		NAGARE SHRUTIKA	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													
	CO1	DESIGN OF COMBINATIONAL CIRCUITS	CO5													
	CO2	DESIGN OF SEQUENTIAL CIRCUITS	Average	2.67	2.67	2.33	2.67	2.33	2.33	2.67	2.67	2.67	2.67	2.33	2.33	2.33
	CO3	EXPLAIN BLOCK DIAGRAM OF CPU, MEMORY AND TYPES OF I/O TRANSFERS														
	CO4															
	CO5															

Class		FYBCA(SCIENCE)	Course Outcomes	Program Outcomes										PSOs		
Subject Code		BCA122		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name		ADVANCED C PROGRAMMING	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	0.00	0.00	0.00
	CO1	WRITE PROGRAMS USING POINTERS, STRUCTURES AND UNIONS	CO5													
	CO2	USE PRE-PROCESSOR DIRECTIVES	Average	2.75	2.75	2.75	3.00	2.75	2.75	2.25	2.50	2.25	2.75	2.25	2.25	2.25
	CO3	MANIPULATE STRINGS USING LIBRARY FUNCTIONS														
	CO4	WRITE PROGRAMS TO PERFORM OPERATIONS ON FILES														
	CO5															

Class		FYBCA(SCIENCE)	Course Outcomes	Program Outcomes										PSOs		
Subject Code		BCA123		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name		OPERATING SYSTEMS CONCEPTS	CO1	3	3	3	3	3	2	3	3	2	3	2	2	2
Semester No		II	CO2	2	2	2	2	2	3	3	2	3	2	2	2	2

Teacher Name		AVHAD SONALI	CO3	3	3	3	3	2	3	3	2	2	3	3	3	3
Course Outcomes			CO4													
	CO1	EXPLAIN BASIC CONCEPTS OF OPERATING SYSTEM	CO5													
	CO2	USE BASIC LINUX COMMANDS AND LINUX DOCUMENTATION	Average	2.67	2.67	2.67	2.67	2.33	2.67	3.00	2.33	2.33	2.67	2.33	2.33	2.33
	CO3	WRITE SHELL SCRIPTS														
	CO4															
	CO5															

Class		FYBCA(SCIENCE)	Course Outcomes	Program Outcomes										PSOs		
Subject Code		BCA124		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name		DATABASE MANAGEMENT SYSTEM	CO1	3	3	3	3	2	2	2	3	2	3	2	2	2
Semester No		II	CO2	3	2	2	3	3	3	2	2	3	3	3	3	3
Teacher Name		SONAWANE NALINEE	CO3	2	3	3	3	3	3	2	2	2	3	3	3	3
Course Outcomes			CO4													
	CO1	DESIGN E-R MODEL FOR GIVEN REQUIREMENTS AND CONVERT THE SAME INTO DATABASE TABLES	CO5													
	CO2	FORMULATES DATABASE QUERIES USING SQL	Average	2.67	2.67	2.67	3.00	2.67	2.67	2.00	2.33	2.33	3.00	2.67	2.67	2.67
	CO3	DESIGN A DATABASE IN APPROPRIATE NORMAL FORM														
	CO4															
	CO5															

Class		FYBCA(SCIENCE)	Course Outcomes	Program Outcomes										PSOs		
Subject Code		BCA125		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name		COMPUTER ORGANIZATION LABORATORY	CO1	3	2	2	2	2	2	2	2	2	3	3	3	
Semester No		II	CO2	3	3	3	3	3	3	3	3	3	3	3	3	

Teacher Name		NAGARE SHRUTIKA	CO3	3	3	3	3	3	3	3	3	3	3	3	3	3	
Course Outcomes			CO4														
	CO1	DESIGN AND IMPLEMENT COMBINATIONAL CIRCUITS	CO5														
	CO2	DESIGN AND IMPLEMENT SEQUENTIAL CIRCUITS	Average	3.00	2.67	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	TRANSLATE REAL WORLD PROBLEMS INTO DIGITAL LOGIC FORMULATIONS															
	CO4																
	CO5																

Class		FYBCA(SCIENCE)	Course Outcomes	Program Outcomes										PSOs		
Subject Code		BCA126		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name		ADVANCED C PROGRAMMING LABORATORY	CO1	3	2	3	3	3	3	3	3	3	3	3	3	3
Semester No		II	CO2	2	3	2	3	2	3	2	3	2	3	3	3	3
Teacher Name		DHONE SAYALI	CO3	3	3	3	3	3	3	3	3	3	3	3	3	3
Course Outcomes			CO4	2.00	3.00	2.00	3.00	2.00	3.00	2.00	3.00	2.00	3.00	0.00	0.00	0.00
	CO1	WRITE PROGRAMS USING POINTERS, STRUCTURES AND UNIONS	CO5													
	CO2	USE PRE-PROCESSOR DIRECTIVES	Average	2.50	2.75	2.50	3.00	2.50	3.00	2.50	3.00	2.50	3.00	2.25	2.25	2.25
	CO3	MANIPULATE STRINGS USING LIBRARY FUNCTIONS														
	CO4	WRITE PROGRAMS TO PERFORM OPERATIONS ON FILES														
	CO5															

Class		FYBCA(SCIENCE)	Course Outcomes	Program Outcomes										PSOs		
Subject Code		BCA127		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name		OPERATING SYSTEMS CONCEPTS	CO1	2	2	2	2	2	2	2	2	2	2	3	3	3
Semester No		II	CO2	3	3	3	3	3	3	3	3	3	3	3	3	3

Teacher Name		AVHAD SONALI	CO3	3.00	2.00	2.00	3.00	2.00	2.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00
Course Outcomes			CO4													
	CO1	INSTALL LINUX AND PACKAGES, CONFIGURE ENVIROMENT	CO5													
	CO2	USE COMMANDS AND EDITORS AND USE DOCUMENTATION	Average	2.67	2.33	2.33	2.67	2.33	2.33	2.67	2.33	2.33	2.67	3.00	3.00	3.00
	CO3	CONFIGURE SECURITY AND NETWORK ENVIRONMENT														
	CO4															
	CO5															

Class		FYBCA(SCIENCE)		Program Outcomes										PSOs		
Subject Code		BCA128	Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name		DATABASE MANAGEMENT SYSTEM -I LABORATORY	CO1	3	3	3	3	3	3	3	3	3	3	3	3	3
Semester No		II	CO2	3.00	2.00	3.00	2.00	3.00	2.00	3.00	2.00	3.00	3.00	3.00	3.00	3.00
Teacher Name		SONAWANE NALINEE	CO3	3	3	3	3	3	3	3	3	3	3	3	3	3
Course Outcomes			CO4													
	CO1	PREPARE E-R DIAGRAM FOR THE GIVEN PROBLEM STATEMENT	CO5													
	CO2	FORMULATE APPROPRIATE SQL DDL QUERIES	Average	3.00	2.67	3.00	2.67	3.00	2.67	3.00	2.67	3.00	3.00	3.00	3.00	3.00
	CO3	FORMULATE APPROPRIATE SQL DML QUERIES														
	CO4															
	CO5															

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Class		SYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs		
Subject Code		BCA301		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
		DATA STRUCTURES	CO1	3	3	3	3	3	3	3	3	3	3	3	3	3
		III	CO2	3	3	3	3	3	3	3	3	3	3	3	3	3
		Shaikh Shaheen	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	Dhone Sayali		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	3	0	0	0
	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	1.75	1.75	1.75
	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	BCA303		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	SOFTWARE ENGINEERING	CO1	3	2	3	2	3	2	3	2	3	2	3	3	3
Semester No	III	CO2	3	2	3	3	3	2	2	3	2	3	2	2	2
Teacher Name	Nalini Sonawane	CO3	3	2	2	2	3	2	3	2	3	3	3	3	3
Course Outcomes		CO4	3	2	2	2	3	3	2	2	2	3	0	0	0

	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	2.00	2.00	2.00
	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	BCA304		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	
Subject Name	COMPUTER NETWORK	CO1	2	2	2	2	2	2	2	2	2	3	2	3	3	
Semester No	III	CO2	3	3	3	3	3	3	3	2	2	2	3	3	3	
Teacher Name	Nivedita Waghmare	CO3	3	3	3	3	3	3	2	2	2	3	2	3	2	
Course Outcomes		CO4	2	2	2	2	2	2	2	2	2	2	2	0	0	0
	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	2.00	2.00	2.00
	CO3	Illustrate applications of Computer Network														
	CO4	Compare and contrast different routing and switching algorithms														
	CO5															

Class		SYBCA SCIENCE		Program Outcomes										PSOs		
Subject Code	BCA305	Course Outcomes	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	Shaikh Shaheen	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														
	CO2	Design an efficient algorithm for the given problem and implement it using C Programming	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															
		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	

Class		SYBCA SCIENCE		Program Outcomes										PSOs		
Subject Code	BCA306	Course Outcomes	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	Waghmare Nivedita	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 Outcomes	Program Outcomes										PSOs		
Subject Code	BCA401		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3
Subject Name	C++	CO1	3	3	2	3	3	2	3	2	3	3	2	2	2
Semester No	IV	CO2	3	3	3	3	3	2	2	3	2	3	2	3	2
Teacher Name	Suvarna Pardeshi	CO3	3	3	3	3	3	3	3	3	3	3	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	3.00	3.00	2.67	3.00	3.00	2.33	2.67	2.67	2.67	3.00	2.33	2.67	2.33

	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		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	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	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	Avhad Sonali	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	
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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
	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	Sayali Dhone	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
	CO3	Apply principles of best practice in cloud application design and management													

	CO4	
	CO5	

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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	3	3	2	2	2	1	1	3	2	3
COMPUTER LITERACY OF STUDENTS AND BASIC UNDERSTANDING OF OPERATIVE SYSTEMS AND WORKING KNOWLEDGE OF SOFTW	V	CO2	2	2	2	2	2	2	2	2	2	1	2	3	2

KNOWL DEGDE OF ORGAN IZE INFOR MATIO N EFFICIE NTLY IN THE FORMS OF OUTLIN ES, CHART S,ETC. BY USING APPRO PRIATE SOFTW	Suvarna Pardeshi	CO3	2	2	2	2	1	1	2	1	1	1	2	3	3	
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	2.00	2.00	2.00	2.33	2.00	1.67	2.00	1.67	1.33	1.00	2.33	2.67	2.67
	CO3	TO USE THE JAVA SDK ENVIRONMENT TO CREATE, DEBUG AND RUN SIMPLE JAVA PROGRAM														
	CO4															
	CO5															

Class		TYBCA SCIENCE		Program Outcomes										PSOs		
Subject Code		Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	
Subject Name	BCA502	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	Sana Patel	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	0	0	0	
	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	2.00	1.75	1.75
	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		Program Outcomes										PSOs		
Subject Code		Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	
Subject Name	BCA503	CO1	2	2	2	2	2	2	2	2	2	2	3	3	3	
Semester No	V	CO2	3	3	3	3	3	3	3	3	3	3	3	3	3	

Teacher Name	Avhad Sonali	CO3	2	2	2	2	2	2	2	2	2	2	2	3	3	3
Course Outcomes		CO4														
	CO1	TO UNDERSTAND THE BASIC OF QUALITY SOFTWARE AND QUALITY FACTORS.	CO5													
	CO2	TO UNDERSTAND SOFTWARE QUALITY ARCHITECTURE AND COMPONENT.	Average	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	3.00	3.00	3.00
	CO3	TO UNDERSTAND SOFTWARE PROJECT LIFE CYCLE, INFRASTRUCTURE AND SOFTWARE QUALITY STANDARDS.														
	CO4															
	CO5															

Class	TYBCA SCIENCE	Course Outcomes	Program Outcomes										PSOs				
Subject Code	BCA504		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3		
Subject Name	OPERATING SYSTEMS	CO1	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3
Semester No	V	CO2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Teacher Name	Nivedita Waghmare	CO3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Course Outcomes		CO4	2	2	2	3	2	2	2	2	2	2	2	2	0	0	0
	CO1	TO UNDERSTAND THE OBJECTIVES, STRUCTURE AND FUNCTIONS OF OPERATING SYSTEM	CO5	2	2	2	2	2	2	2	2	2	2	2	0	0	0
	CO2	TO LEARN ABOUT CONCEPT OF PROCESSES, THREADS AND ITS SCHEDULING ALGORITHMS.	Average	2.40	2.40	2.40	2.60	2.40	2.40	2.40	2.40	2.40	2.40	2.40	1.80	1.80	1.80

	CO3	TO UNDERSTAND DESIGN ISSUES IN PROCESS SYNCHRONIZATION AND DEADLOCK MANAGEMENT.
	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	
Semester No		V	CO2	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	
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	3.00	3.00	
	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	Patel Sana		CO3	3	3	3	3	3	3	3	3	3	3	2	2	2
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	2.33	2.33	2.33
	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	2	2	2
Semester No	V	CO2	2	2	2	2	2	2	2	2	2	2	2	2	2
Teacher Name	Shaheen Shaikh	CO3													
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				
	CO3													2.33	2.33	2.33	
	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	Patel Sana		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	0	0	0
	CO1	THE OBJECTIVE OF THIS COURSE IS TO UNDERSTAND THE OPERATING SYSTEM AND DEVELOP APPLICATIONS USING GOOGLE'S ANDROID OPEN-SOURCE PLATFORM.	CO5	2	2	2	2	2	2	2	2	2	2	0	0	0
	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	1.80	1.80	1.80
	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	3	
Semester No		VI	CO2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Teacher Name		Waghmare Nivedita	CO3														
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	2.50	3.00	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	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	0.00	0.00	0.00	
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	3	0	0	0	
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	2.60	2.40	1.60	1.60	1.60
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	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	2.50	2.67	2.67	2.67
CO3																
CO4																
CO5																

Class		TYBCA SCIENCE		Program Outcomes										PSOs		
Subject Code	BCA605	Course Outcomes	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	Patel Sana	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	0	0	0	
	CO1	Describe the process of developing mobile applications														
	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	2.25	2.25	2.25	
	CO3	Design and implement mobile applications involving data storage in SQLite database														
	CO4	Use location-based services while developing applications														
	CO5															

Class		TYBCA SCIENCE		Program Outcomes										PSOs		
Subject Code	BCA606	Course Outcomes	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	

CO-PO Mapping

		Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
		1 BCA111	2.75	2.50	2.50	2.00	2.00	2.25	2.50	2.00	2.75	2.00
		2 BCA112	2.50	2.75	2.75	3.00	3.00	2.75	2.50	2.25	2.75	2.75
		3 BCA113	1.80	1.80	1.80	1.60	2.60	2.60	1.80	1.80	2.00	2.00
		4 BCA114	2.50	2.75	2.25	2.75	3.00	2.50	2.50	2.50	3.00	2.50
		5 BCA115	3.00	3.00	3.00	3.00	2.50	2.50	2.50	2.25	2.50	2.25
		6 BCA116	3.00	3.00	3.00	3.00	2.67	2.67	2.00	2.00	2.33	2.67
		7 BCA117	3.00	3.00	3.00	3.00	3.00	3.00	2.00	2.00	2.00	2.00
		8 BCA118	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.00	2.00	3.00
		9 BCA121	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		10 BCA122	2.67	2.67	2.67	3.00	2.67	2.67	2.00	2.33	2.33	3.00
		11 BCA123	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		12 BCA124	2.00	3.00	2.00	3.00	2.00	3.00	2.00	3.00	2.00	3.00
		13 BCA125	3.00	2.00	2.00	3.00	2.00	2.00	3.00	2.00	2.00	3.00
		14 BCA126	3.00	2.00	3.00	2.00	3.00	2.00	3.00	2.00	3.00	3.00
		15 BCA127	2.75	2.50	2.50	2.00	2.00	2.25	2.50	2.00	2.75	2.00
		16 BCA128	2.50	2.75	2.75	3.00	3.00	2.75	2.50	2.25	2.75	2.75
		17 0	1.80	1.80	1.80	1.60	2.60	2.60	1.80	1.80	2.00	2.00
		18 0	2.50	2.75	2.25	2.75	3.00	2.50	2.50	2.50	3.00	2.50
		19 0	3.00	3.00	3.00	3.00	2.50	2.50	2.50	2.25	2.50	2.25
		20 0	3.00	3.00	3.00	3.00	2.67	2.67	2.00	2.00	2.33	2.67
		21 0	3.00	3.00	3.00	3.00	3.00	3.00	2.00	2.00	2.00	2.00
		22 0	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.00	2.00	3.00
		23 0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FY	FY	24 0	2.67	2.67	2.67	3.00	2.67	2.67	2.00	2.33	2.33	3.00
		25 BCA301	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		26 BCA302	2.00	3.00	2.00	3.00	2.00	3.00	2.00	3.00	2.00	3.00
		27 BCA303	3.00	2.00	2.50	2.25	3.00	2.25	2.50	2.25	2.50	2.75
		28 BCA304	2.50	2.50	2.50	2.50	2.50	2.25	2.00	2.00	2.25	2.50
		29 BCA305	2.33	2.33	2.33	3.00	2.67	2.33	2.33	2.33	2.33	2.67
		30 BCA306	2.67	2.67	2.67	2.67	2.33	2.00	2.33	2.33	2.33	2.67
		31 BCA401	3.00	3.00	2.67	3.00	3.00	2.33	2.67	2.67	2.67	3.00
		32 BCA402	2.67	2.67	2.67	3.00	2.67	2.00	2.00	2.67	2.33	2.67
		33 BCA403	2.75	2.75	2.75	2.75	2.75	2.25	2.00	2.50	2.25	2.75
		34 BCA404	3.00	2.33	2.33	2.67	2.33	2.33	2.33	2.00	2.33	2.67
		35 BCA405	3.00	2.67	3.00	2.33	2.67	3.00	2.67	2.67	2.67	2.00
SY		36 BCA406	2.67	2.67	2.67	2.67	2.67	3.00	2.33	2.33	2.33	3.00
	SY	37 BCA407	2.33	2.33	2.33	2.33	2.33	2.33	2.67	2.67	2.67	2.67
		51 BCA501	2.00	2.00	2.00	2.33	2.00	1.67	2.00	1.67	1.33	1.00
		52 BCA502	1.75	1.50	1.75	1.25	1.00	1.50	1.75	1.25	1.25	1.00
		53 BCA503	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33
		54 BCA504	2.40	2.40	2.40	2.60	2.40	2.40	2.40	2.40	2.40	2.40

		55	BCA505	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67
		56	BCA506	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67
		57	BCA507	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
		58	BCA601	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
		59	BCA602	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
		60	BCA603	2.60	2.40	2.60	2.40	2.60	2.40	2.60	2.40	2.60	2.40
		61	BCA604	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
		62	BCA605	2.00	3.00	2.00	2.50	2.50	2.50	2.50	2.50	2.50	2.50
		63	BCA606	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
TY	TY	64	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
0.36	0.36	0.36	0.32	0.52	0.52	0.36	0.36	0.4	0.4
1.166667	1.283333	1.05	1.283333333	1.4	1.166667	1.166667	1.166667	1.4	1.166667
2.52	2.52	2.52	2.52	2.1	2.1	2.1	1.89	2.1	1.89
2.52	2.52	2.52	2.52	2.24	2.24	1.68	1.68	1.96	2.24
1.56	1.56	1.56	1.56	1.56	1.56	1.04	1.04	1.04	1.04
3	3	3	3	3	3	3	2	2	3
0	0	0	0	0	0	0	0	0	0
0.533333	0.533333	0.533333	0.6	0.533333	0.533333	0.4	0.466667	0.466667	0.6
0	0	0	0	0	0	0	0	0	0
0.4	0.6	0.4	0.6	0.4	0.6	0.4	0.6	0.4	0.6
1.4	0.933333	0.933333	1.4	0.933333	0.933333	1.4	0.933333	0.933333	1.4
2.52	2.52	2.52	2.52	2.24	2.24	1.68	1.68	1.96	2.24
1.56	1.56	1.56	1.56	1.56	1.56	1.04	1.04	1.04	1.04
3	3	3	3	3	3	3	2	2	3
0	0	0	0	0	0	0	0	0	0
0.533333	0.533333	0.533333	0.6	0.533333	0.533333	0.4	0.466667	0.466667	0.6
0	0	0	0	0	0	0	0	0	0
0.4	0.6	0.4	0.6	0.4	0.6	0.4	0.6	0.4	0.6
1.4	0.933333	0.933333	1.4	0.933333	0.933333	1.4	0.933333	0.933333	1.4
2.52	2.52	2.52	2.52	2.24	2.24	1.68	1.68	1.96	2.24
1.56	1.56	1.56	1.56	1.56	1.56	1.04	1.04	1.04	1.04
3	3	3	3	3	3	3	2	2	3
0	0	0	0	0	0	0	0	0	0
0.533333	0.533333	0.533333	0.6	0.533333	0.533333	0.4	0.466667	0.466667	0.6
0	0	0	0	0	0	0	0	0	0
0.4	0.6	0.4	0.6	0.4	0.6	0.4	0.6	0.4	0.6
1.4	0.933333	0.933333	1.4	0.933333	0.933333	1.4	0.933333	0.933333	1.4
2.52	2.52	2.52	2.52	2.24	2.24	1.68	1.68	1.96	2.24
1.56	1.56	1.56	1.56	1.56	1.56	1.04	1.04	1.04	1.04
3	3	3	3	3	3	3	2	2	3
0	0	0	0	0	0	0	0	0	0
0.533333	0.533333	0.533333	0.6	0.533333	0.533333	0.4	0.466667	0.466667	0.6
0	0	0	0	0	0	0	0	0	0
0.4	0.6	0.4	0.6	0.4	0.6	0.4	0.6	0.4	0.6
1.4	0.933333	0.933333	1.4	0.933333	0.933333	1.4	0.933333	0.933333	1.4
2.666667	2.666667	2.666667	2.666666667	2.333333	2	2.333333	2.333333	2.333333	2.666667
0.6	0.6	0.533333	0.6	0.6	0.466667	0.533333	0.533333	0.533333	0.6
0.533333	0.533333	0.533333	0.6	0.533333	0.4	0.4	0.533333	0.466667	0.533333
0.55	0.55	0.55	0.55	0.55	0.45	0.4	0.5	0.45	0.55
0.6	0.466667	0.466667	0.533333333	0.466667	0.466667	0.466667	0.4	0.466667	0.533333
3	2.666667	3	2.333333333	2.666667	3	2.666667	2.666667	2.666667	2
2.666667	2.666667	2.666667	2.666666667	2.666667	3	2.333333	2.333333	2.333333	3
1.213333	1.213333	1.213333	1.213333333	1.213333	1.213333	1.386667	1.386667	1.386667	1.386667
2	2	2	2.333333333	2	1.666667	2	1.666667	1.333333	1
1.75	1.5	1.75	1.25	1	1.5	1.75	1.25	1.25	1
0.466667	0.466667	0.466667	0.466666667	0.466667	0.466667	0.466667	0.466667	0.466667	0.466667
2.4	2.4	2.4	2.6	2.4	2.4	2.4	2.4	2.4	2.4
1.528889	1.528889	1.528889	1.528888889	1.528889	1.528889	1.528889	1.528889	1.528889	1.528889

2.097778	2.097778	2.097778	2.097777778	2.097778	2.097778	2.097778	2.097778	2.097778	2.097778
1.466667	1.466667	1.466667	1.466666667	1.466667	1.466667	1.466667	1.466667	1.466667	1.466667
2	2	2	2	2	2	2	2	2	2
2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
2.52	2.52	2.52	2.52	2.24	2.24	1.68	1.68	1.96	2.24
1.56	1.56	1.56	1.56	1.56	1.56	1.04	1.04	1.04	1.04
3	3	3	3	3	3	3	2	2	3
0	0	0	0	0	0	0	0	0	0
0.533333	0.533333	0.533333	0.6	0.533333	0.533333	0.4	0.466667	0.466667	0.6

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
46.66667	46.66667	46.66667	46.66666667	46.66667	46.66667	46.66667	46.66667	46.66667	46.66667
84	84	84	84	84	84	84	84	84	84
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
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
20	20	20	20	20	20	20	20	20	20
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
20	20	20	20	20	20	20	20	20	20
46.66667	46.66667	46.66667	46.66666667	46.66667	46.66667	46.66667	46.66667	46.66667	46.66667
84	126	84	126	74.66667	112	56	84	65.33333	74.66667
56.72727	62.4	62.4	78	78	69.33333	41.6	52	37.81818	52
120	109.0909	109.0909	100	100	109.0909	120	88.88889	72.72727	109.0909
0	0	0	0	0	0	0	0	0	0
21.33333	19.39394	23.7037	21.81818182	17.77778	21.33333	16	18.66667	15.55556	24
0	0	0	0	0	0	0	0	0	0
13.33333	20	13.33333	20	15	22.5	20	30	17.14286	22.5
46.66667	31.11111	31.11111	46.66666667	31.11111	31.11111	70	46.66667	46.66667	70
84	84	84	84	74.66667	74.66667	56	84	98	74.66667
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
112.5	112.5	112.5	100	112.5	112.5	150	85.71429	85.71429	100
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
26.66667	17.77778	26.66667	20	26.66667	17.77778	20	15.55556	23.33333	20
0	0	0	0	0	0	0	0	0	0
16	24	16	24	16	26.66667	20	30	17.77778	24
60	40	40	46.66666667	35	40	60	40	40	52.5
100	100	100	100	100	100	100	100	100	100
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
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
100	100	100	100	100	100	100	100	100	100
100	100	100	100	100	100	100	100	100	100
20	20	20	20	20	20	20	20	20	20
100	100	100	100	100	100	100	100	100	100

57.33333	57.33333	57.33333	57.33333333	57.33333	57.33333	57.33333	57.33333	57.33333	57.33333
78.66667	78.66667	78.66667	78.66666667	78.66667	78.66667	78.66667	78.66667	78.66667	78.66667
73.33333	73.33333	73.33333	73.33333333	73.33333	73.33333	73.33333	73.33333	73.33333	73.33333
100	100	100	100	100	100	100	100	100	100
100	100	100	100	100	100	100	100	100	100
96.92308	105	96.92308	105	86.15385	93.33333	64.61538	70	75.38462	93.33333
62.4	62.4	62.4	62.4	62.4	62.4	41.6	41.6	41.6	41.6
150	100	150	120	120	120	120	80	80	120
0	0	0	0	0	0	0	0	0	0
20	20	20	22.5	20	20	15	17.5	17.5	22.5

TY	2	BCA502	2.00	1.75	1.75
	3	BCA503	3.00	3.00	3.00
	4	BCA504	1.80	1.80	1.80
	5	BCA505	3.00	3.00	3.00
	6	BCA506	2.33	2.33	2.33
	7	BCA507	0.00	0.00	0.00
	8	BCA601	1.80	1.80	1.80
	9	BCA602	3.00	3.00	3.00
	10	BCA603	0.00	0.00	0.00
	11	BCA604	0.00	0.00	0.00

BCA502	0.613333	0.536667	0.536667
BCA503	0.6	0.6	0.6
BCA504	0.552	0.552	0.552
BCA505	3	3	3
BCA506	2.333333	2.333333	2.333333
BCA507	0	0	0
BCA601	1.8	1.8	1.8
BCA602	1.72	1.72	1.72
BCA603	0	0	0
BCA604	0	0	0

BCA502	30.66667	30.66667	30.66667
BCA503	20	20	20
BCA504	30.66667	30.66667	30.66667
BCA505	100	100	100
BCA506	100	100	100
BCA507	#DIV/0!	#DIV/0!	#DIV/0!
BCA601	100	100	100
BCA602	57.33333	57.33333	57.33333
BCA603	#DIV/0!	#DIV/0!	#DIV/0!
BCA604	#DIV/0!	#DIV/0!	#DIV/0!