# TEACHING PLAN DEPARTMENT OF COMPUTER SCIENCE BACHELOR OF COMPUTER APPLICATION SBMS COLLEGE, SUALKUCHI

Department:	<b>Computer Science</b>	Semester	I
Course:	Major	Paper No:	BCA-HC-1016
Credit:	6	Marks:	80

Paper	Paper:1				
	Paper	<b>Name: Introduction</b>	to C programr	ning	
Unit	<b>Course Content</b>	Allotted to	Hours	Months	Date
I	Overview of C	Amitabh Sarma	7 Hrs	August- November	1 August- 20 November
II	Decision Making and Branching Statement	Simanta Sarma	16 Hrs	August- November	1 August- 20 November
III	Arrays Functions & Structures and Unions, Pointers	Amitabh Sarma	20 Hrs	August- November	1 August- 20 November
IV	File Management in C	Himangshu Das	10 Hrs	August- November	1 August- 20 November
V	Practical	Amitabh Sarma	10 Hrs	August- November	1 August- 20 November

Department:	Computer Science	Semester	I
Course:	Major	Paper No:	BCA-HC-1026
Credit:	6	Marks:	80

Paper	Paper:1I						
	Paper Name: Computer Fundamentals & ICT Hardware						
Unit	<b>Course Content</b>	Allotted to	Hours	Months	Date		
I	Evolution of Computer system	Himangshu Das	15Hrs	August- November	1 August- 20 November		
II	Hard Disk Drive: Optical Media	Simanta Sarma	10 Hrs	August- November	1 August- 20 November		
III	Processor	Amitabh Sarma	14 Hrs	August- November	1 August- 20 November		
IV	SMPS	Himangshu Das	07Hrs	August- November	1 August- 20 November		
V	Practical	Amitabh Sarma	10 Hrs	August- November	1 August- 20 November		

Department:	<b>Computer Science</b>	Semester	I
Course:	GE	Paper No:	BCA-HG-1026
Credit:	6	Marks:	50

Paper:III

**Paper Name: OFFICE AUTOMATION** 

Unit	<b>Course Content</b>	Allotted to	Hours	Month	Month
Ι	Word Processing	Himangshu Das	7 Hrs	August- November	1 August- 20 November
II	Spreadsheet	Simanta Sarma	16 Hrs	August- November	1 August- 20 November
III	Presentation Tools	Amitabh Sarma	20 Hrs	August- November	1 August- 20 November
IV	DTP Software	Himangshu Das	10 hrs	August- November	1 August- 20 November
V	Practical	Amitabh Sarma	10 Hrs	August- November	1 August- 20 November

Department:	Computer Science	Semester	Ш
Course:	Major	Paper No:	BCA-HC-3016
Credit:	6	Marks:	80

Pape	Paper:1						
	Paper Name: Software Engineering						
Unit	<b>Course Content</b>	Allotted to	Hours	Months	Date		
I	Introduction	Simanta Sarma	16Hrs	August- November	1 August- 20 November		
II	Software Project Planning	Simanta Sarma	12 Hrs	August- November	1 August- 20 November		
III	Software Design	Amitabh Sarma	07 Hrs	August- November	1 August- 20 November		
IV	Software Testing and Maintenance	Himangshu Das	16Hrs	August- November	1 August- 20 November		

Department:	Computer Science	Semester	III
Course:	Major	Paper No:	ВСА-НС-3026
Credit:	6	Marks:	80

Paper	Paper:1I						
	Paper Name: Data Structure and Algorithms						
Unit	Course Content	Allotted to	Hours	Month	Date		
Ι	Definition, Linked Structure	Simanta Sarma	07Hrs	August- November	1 August- 20 November		
II	Linked Structure	Amitabh Sarma	10 Hrs	August- November	1 August- 20 November		
III	Stacks and Queues Binary Trees	Amitabh Sarma	12 Hrs	August- November	1 August- 20 November		
IV	Searching Sorting	Amitabh Sarma	16Hrs	August- November	1 August- 20 November		
V	Practical	Amitabh Sarma	10 Hrs	August- November	1 August- 20 November		

Department:	Computer Science	Semester	Ш
Course:	Major	Paper No:	BCA-HC-3036
Credit:	6	Marks:	80

Paper	Paper:1II					
_	Paper Name: DATABASE MANAGEMENT SYSTEM					
Unit	<b>Course Content</b>	Allotted to	Hours	Month	Date	
Ι	File Structure	Simanta Sarma	7 Hrs	August- Novemb er	1 August- 20 November	
II	Overview of Database Management System	Simanta Sarma	10 Hrs	August- Novemb er	1 August- 20 November	
III	Relational Models	Himangshu Das	10 Hrs	August- Novemb er	1 August- 20 November	
IV	Database Design	Amitabh Sarma	12 6Hrs	August- Novemb er	1 August- 20 November	
V	Practical	Amitabh Sarma	10 Hrs	August- Novemb er	1 August- 20 November	

Department:	Computer Science	Semester	III
Course:	SEC	Paper No:	BCA-SE-3014
Credit:	6	Marks:	80

Paper	Paper:1V						
	Paper Name: Web Technology						
Unit	Course Content	Allotted to	Hours	Months	Date		
Ι	Overview of the World Wide Web and the internet	Simanta Sarma	10 Hrs	August- November	1 August- 20 November		
II	Inside the firewall AND Linking database to the Web	Himangshu Das	10 Hrs	August- November	1 August- 20 November		
III	HTML editors and tools	Himangshu Das	10 Hrs	August- November	1 August- 20 November		
IV	HTML editors and tools	Himangshu Das	10 Hrs	August- November	1 August- 20 November		
V	Practical	Amitabh Sarma	10 Hrs	August- November	1 August- 20 November		

Department:	Computer Science	Semester	III
Course:	GE	Paper No:	BCA-HG-3016
Credit:	6	Marks:	80

Paper	Paper:V					
Paper Name: Introduction to Indian History						
Unit	Course Content	Allotted to	Hours	Month	Date	
I	Features of Indus Valley Civilization	Amitabh Sarma	16 Hrs	August- November	1 August- 20 November	
II	Gupta Period	Himangshu Das	10 Hrs	August- November	1 August- 20 November	
III	Foundation of Muslim rule in India	Simanta Sarma	12 Hrs	August- November	1 August- 20 November	
IV	Arrival of Europeans	Himangshu Das	10Hrs	August- November	1 August- 20 November	

Department:	Computer Science	Semester	V
Course:	Major	Paper No:	BCA-HC-5016
Credit:	06	Marks:	80

Pape	r:1					
Paper Name: Java Programming						
Unit	Course Content	Allotted to	Hours	Month	Date	
I	JAVA language basics	Amitabh Sarma	12 Hrs	August- November	1 August- 20 November	
II	Operators and Control Statements	Amitabh Sarma	15Hrs	August- November	1 August- 20 November	
III	Classes and Methods	Amitabh Sarma	12Hrs	August- November	1 August- 20 November	
IV	Inheritance	Himangshu Das	16 Hrs	August- November	1 August- 20 November	
V	Practical	Amitabh Sarma	10 Hrs	August- November	1 August- 20 November	

Department:	Computer Science	Semester	V
Course:	Major	Paper No:	BCA-HC-5026
Credit:	6	Marks:	80

Paper	Paper:1I Paper Name: Operating System				
Unit	Course Content	Allotted to	Hours	Month	Date
I	Introduction	Himangshu Das	14 Hrs	August- November	1 August- 20 November
II	Processes, Process Synchronization	Amitabh Sarma	15Hrs	August- November	1 August- 20 November
III	Scheduling , Deadlocks Memory management	Simanta Sarma	12Hrs	August- November	1 August- 20 November
IV	File system , I/O management	Himangshu Das	14Hrs	August- November	1 August- 20 November
V	Practical	Amitabh Sarma	10 Hrs	August- November	1 August- 20 November

Department:	Computer Science	Semester	V
Course:	DSE	Paper No:	BCA-HE-5046
Credit:	6	Marks:	50

Paper :IV Paper Name: Programming in Python					
Unit	<b>Course Content</b>	Allotted to	Hours	Month	Date
I	Planning the Computer Program	Amitabh Sarma	14 Hrs	August- November	1 August- 20 November
II	Techniques of Problem Solving	Amitabh Sarma	07 Hrs	August- November	1 August- 20 November
III	Overview of Programming	Amitabh Sarma	07 Hrs	August- November	1 August- 20 November
IV	Introduction to Python Creating Python Programs Iteration and Recursion	Himangshu Das	14Hrs	August- November	1 August- 20 November
V	Practical	Amitabh Sarma	10 Hrs	August- November	1 August- 20 November

Department:	Computer Science	Semester	П
Course:	Major	Paper No:	BCA-HC-2016
Credit:	6	Marks:	80

Paper	Paper:1						
	Paper Name : Mathematics –I						
Unit	<b>Course Content</b>	Allotted to	Hours	Month	Date		
Ι	Determinants and Matrices	Simanta Sarma	16Hrs	January- May	17 January- 25 May		
II	Complex Numbers	Simanta Sarma	15 Hrs	January- May	17 January- 25 May		
III	Limits and Derivatives	Amitabh Sarma	07 Hrs	January- May	17 January- 25 May		
IV	Calculus	Simanta Sarma	14Hrs	January- May	17 January- 25 May		

Depa	Department: Computer Sc		cience	Paper No:		BCA-HC-2026	
Cour	se:	Major					
Cred	it:	6	Marks:		80		
Pape	r:1I	Pane	er Name : Di	 gital Los	gic Fundamer	ntals	
Unit	Cours	se Content	Allotte		Hours	Month	Date
I	Boolean Logic Ga	Algebra and ates	Amitabh Sa	rma	16Hrs	January- May	17 January- 20 May
II	Combina	ntional Circuit	Amitabh Sa	rma	15 Hrs	January- May	17 January- 20 May
III	Sequenti	al Circuit	Amitabh Sa	rma	12 Hrs	January- May	17 January- 20 May
IV	Counters	Registers	Simanta Sar	rma	14Hrs	January- May	17 January- 20 May
V	Practical		Amitabh Sa	rma	10 Hrs	August- November	1 August- 20 November

Department:	Computer Science	Semester	П
Course:	GE	Paper No:	BCA-HG-2026
Credit:	6	Marks:	80

Paper:1II					
Paper Name :Introduction to Bio-Informatics					
Unit	Course Content	Allotted to	Hours	Month	Date
I	Introduction	Amitabh Sarma	10Hrs	January- May	17 January- 20 May
II	Biological Databases	Amitabh Sarma	10Hrs	January- May	17 January- 20 May
III	Molecular Phylogeny	Amitabh Sarma	7Hrs	January- May	17 January- 20 May
IV	Biocomputing in Genomics and Proteomics	Himangshu Das	20 Hrs	January- May	17 January- 20 May

Department:	Computer Science	Semester	IV
Course:	Major	Paper No:	BCA-HC-4016
Credit:	6	Marks:	80

Paper	Paper:1					
	Paper Name: Computer Organization and Architecture					
Unit	<b>Course Content</b>	Allotted to	Hours	Feb- March	Date	
I	Introduction	Himangshu Das	10 Hrs	January- May	17 January- 20 May	
II	Register Transfer Logic	Amitabh Sarma	10Hrs	January- May	17 January- 20 May	
III	Processor Logic Design	Simanta Sarma	10Hrs	January- May	17 January- 20 May	
IV	Control Logic Design	Himangshu Das	10 Hrs	January- May	17 January- 20 May	

Department:	Computer Science	Semester	IV
Course:	Major	Paper No:	BCA-HC-4026
Credit:	6	Marks:	180

Paper	Paper:1I						
	Paper Name : Mathematics-II						
Unit	Course Content	Allotted to	Hours	month	Date		
I	Sets, Relations and Functions	Himangshu Das	6 Hrs	January- May	17 January- 20 May		
II	Graph theory	Amitabh Sarma	6 Hrs	January- May	17 January- 20 May		
III	Combinatorics	Simanta Sarma	12Hrs	January- May	17 January- 20 May		
IV	Matrices , Logic	Himangshu Das	12 Hrs	January- May	17 January- 20 May		

Department:	Computer Science	Semester	IV
Course:	Major	Paper No:	BCA-HC-4036
Credit:	6	Marks:	80

Paper	Paper:1					
	Paper Name: Object Oriented Programming in C++					
Unit	<b>Course Content</b>	Allotted to	Hours	Month	Month	
I	Introduction to object oriented programming	Simanta Sarma	10Hrs	January- May	17 January- 20 May	
II	Classes and objects	Simanta Sarma	16Hrs	January- May	17 January- 20 May	
III	Function and operator overloading	Simanta Sarma	10 Hrs	January- May	17 January- 20 May	
IV	Inheritance	Himangshu Das	16Hrs	January- May	17 January- 20 May	
V	Practical	Amitabh Sarma	10 Hrs	January- May	17 January- 20 May	

Department:	Computer Science	Semester	IV
Course:	SEC	Paper No:	BCA-SE-4034
Credit:	6	Marks:	80

Paper	Paper:1I					
	Paper Name :Advanced Web Technology					
Unit	<b>Course Content</b>	Allotted to	Hours	Month	Date	
I	Web Development Techniques	Simanta Sarma	12 Hrs	January- May	17 January- 20 May	
II	Current Trends in Web Technology	Simanta Sarma	22 Hrs	January- May	17 January- 20 May	
III	Practical	Amitabh Sarma	10 Hrs	January- May	17 January- 20 May	

Department:	Computer Science	Semester	IV
Course:	GE	Paper No:	BCA-HG-4026
Credit:	6	Marks:	80

Paper	Paper:1II						
_	Paper Name INFORMATION SECURITY AND CYBER LAWS						
Unit	Course Content	Allotted to	Hours	Month	Date		
I	Course Introduction	Himangshu Das	12 Hrs	January- May	17 January- 20 May		
II	Digital Crime	Himangshu Das	12 Hrs	January- May	17 January- 20 May		
III	Information Gathering Techniques	Simanta Sarma	12Hrs	January- May	17 January- 20 May		
IV	Risk Analysis and Threat	Himangshu Das	12Hrs	January- May	17 January- 20 May		

Department:	<b>Computer Science</b>	Semester	VI
Course:	Major	Paper No:	BCA-HC-6016
Credit:	6	Marks:	80

Paper	Paper:I							
	Paper Name: System Administration using Linux							
Unit	<b>Course Content</b>	Allotted to	Hours	Month	Date			
I	Introduction	Himangshu Das	12 Hrs	January- May	17 January- 20 May			
II	Linux file system	Amitabh Sarma	15 Hrs	January- May	17 January- 20 May			
III	Basic Linux Commands	Himangshu Das	12Hrs	January- May	17 January- 20 May			
IV	Process Creation	Simanta Sarma	12Hrs	January- May	17 January- 20 May			

Department:	Computer Science	Semester	VI
Course:	Major	Paper No:	BCA-HC-6026
Credit:	6	Marks:	80

Paper	Paper:1I					
Paper Name : Computer Networks						
Unit	<b>Course Content</b>	Allotted to	Marks	Hours	Month	
I	Physical Layer	Himangshu Das	10	January- May	17 January- 20 May	
II	Digital Transmission	Himangshu Das	10	January- May	17 January- 20 May	
III	Data Link Layer Network Layer Transport Layer	Himangshu Das	10	January- May	17 January- 20 May	
IV	Application layer & Network Security	Simanta Sarma	10	January- May	17 January- 20 May	
V	Practical	Amitabh Sarma	10 Hrs	January- May	17 January- 20 May	

Department:	Political Science	Semester	VI
Course:	Major	Paper No:	BCA-HE-6036
Credit:	6	Marks:	80

Pape	Paper:III					
Paper Name :Multimedia and Applications						
Unit	<b>Course Content</b>	Allotted to	Marks	Month	Month	
I	Multimedia	Himangshu Das	10	January- May	17 January- 20 May	
II	Text Sound	Himangshu Das	10	January- May	17 January- 20 May	
III	Images Internet and Multimedia	Himangshu Das	10	January- May	17 January- 20 May	
IV	Making Multimedia	Simanta Sarma	10	January- May	17 January- 20 May	
V	Practical	Himangshu Das	10 Hrs	January- May	17 January- 20 May	

Department:	Computer Science	Semester	VI
Course:	Major	Paper No:	BCA-HE-6066
Credit:	6	Marks:	100

Paper	Paper:1V							
	Paper Name: ARTIFICIAL INTELLIGENCE							
Unit	Course Content	Allotted to	Hours	Feb-	Date			
Ι	Introduction	Simanta Sarma	20Hrs	March January- May	17 January- 20 May			
II	Problem Solving and Searching Techniques	Simanta Sarma	10Hrs	January- May	17 January- 20 May			
III	Knowledge Representation	Simanta Sarma	10Hrs	January- May	17 January- 20 May			
IV	Dealing with Uncertainty and Inconsistencies	Amitabh Sarma	10 Hrs	January- May	17 January- 20 May			

Simanta Sarma

**HOD Department of Computer Science**