

**DEPARTMENT OF COMPUTER SCIENCE**  
**Gurukula Kangri Vishwavidyalaya, Haridwar**  
**SCHEME OF EXAMINATION**

BCS-2015

COURSE TYPE	PAPER CODE	PAPER NAME	PERIODS PER WEEK			EVALUATION SCHEME		
			L	P	C	CIA	ESE	TOTAL
<b><u>SEMESTER - I</u></b>								
DSC-1C	BCS-C101	Object Oriented Programming in C++	4	-	4	30	70	100
	BCS-C151	C++ Programming Lab	-	4	2	30	70	100
<b><u>SEMESTER - II</u></b>								
DSC-2C	BCS-C201	Data Structures and File Processing	4	-	4	30	70	100
	BCS-C251	Data Structures and File Processing Lab	-	4	2	30	70	100
<b><u>SEMESTER - III</u></b>								
DSC-3C	BCS-C301	Numerical Computing	4	-	4	30	70	100
	BCS-C351	Numerical Computing Lab	-	4	2	30	70	100
SEC-1		<b>Choose any One</b> 1. Logic and Sets* 2. Analytical Geometry* 3. Number Theory*	2	-	2	30	70	100
<b><u>SEMESTER - IV</u></b>								
DSC-4C	BCS-C401	Design and Analysis of Algorithms	4	-	4	30	70	100
	BCS-C451	Design and Analysis of Algorithms Lab	-	4	2	30	70	100
SEC-2*		<b>Choose any One</b> 1. Vector Calculus* 2. Transportation and Game Theory* 3. Probability and Statistics*	2	-	2	30	70	100
<b><u>SEMESTER - V</u></b>								
DSE-1C	<b>Choose any One theory paper and its corresponding lab</b>							
	BCS-E501A	Operating Systems	4	-	4	30	70	100
	BCS-E551A	Operating Systems Lab	-	4	2	30	70	100
	BCS-E501B	Data Mining	4	-	4	30	70	100
	BCS-E551B	Data Mining Lab	-	4	2	30	70	100
	BCS-E501C	Cryptography	4	-	4	30	70	100
	BCS-E551C	Cryptography Lab	-	4	2	30	70	100
SEC-3	<b>Choose any One theory paper and its corresponding lab</b>							
	BCS-S502A	Computer Graphics	1	-	1	30	70	100
	BCS-S552A	Computer Graphics Lab	-	2	1	30	70	100
	BCS-S502B	Electronic Commerce	2	-	2	30	70	100
		Combinatorial Optimization*						
<b><u>SEMESTER - VI</u></b>								
DSE-2C	<b>Choose any One theory paper and its corresponding lab</b>							
	BCS-E601A	Information Security	4	-	4	30	70	100
	BCS-E651A	Information Security Lab	-	4	2	30	70	100
	BCS-E601B	Database Applications	4	-	4	30	70	100
	BCS-E651B	Database Applications Lab	-	4	2	30	70	100
	BCS-E601C	Computer Networks	4	-	4	30	70	100
	BCS-E651C	Computer Networks Lab	-	4	2	30	70	100
SEC-4	<b>Choose any One</b>							
	BCS-S602	Modeling and Simulation	2	-	2	30	70	100
		Graph Theory*						
		Boolean Algebra*						

**DSC** - Discipline Specific Core    **DSE** - Discipline Specific Elective    **SEC** - Skill Enhancement Course

**L**- Lecture    **P** - Practical    **C**- Credit    **CIA** - Continuous Internal Assessment    **ESE** - End Semester Examination

*\*The syllabi of these papers are approved by the Board Of Studies of Department of Mathematics held on 30.07.2015 and to be taught by the faculty of the Department of Mathematics.*