### SCHEME OF EXAMINATION

&

## **DETAILED SYLLABUS**

For

### BACHELOR OF COMPUTER APPLICATIONS (BCA) DEGREE

### **GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY SECTOR-16C, DWARKA, DELHI**

Note : A Minimum of 40 Lectures is mandatory for each course. Syllabus of Bachelor of Computer Applications (BCA), approved by BCA Coordination Committee on 26<sup>th</sup> July 2011 & Sub-Committee Academic Council held 28<sup>th</sup> July 2011. W.e.f. academic session 2011-12

### FIRST SEMESTER EXAMINATION

Code No.	Paper	L	T/P	Credits	Marks Internal	Marks External
THEROY I	PAPERS					
BCA 101	Mathematics – I	3	1	4	25	75
BCA 103	Technical Communication	3	0	3	25	75
BCA 105	Introduction to Programming Language using C	3	1	4	25	75
BCA 107	Introduction to Computers & IT	3	1	4	25	75
BCA 109	Physics	3	1	4	25	75
PRACTICA	ALS					
BCA 151	Practical – I C Prog. Lab	0	6	3	40	60
BCA 153	Practical – II IT Lab	0	6	3	40	60
BCA 155*	Communication Skills	2	0	2	100	
	Total	17	16	27	305	495

#### **\*NUES**

**TOTAL MARKS: 800** 

#### SECOND SEMESTER EXAMINATION

Code No.	Paper	L	T/P	Credits	Marks Internal	Marks External
THEROY I						
BCA 102	Mathematics – II	3	1	4	25	75
BCA 104	Principles of Management	3	0	3	25	75
BCA 106	Digital Electronics	3	1	4	25	75
BCA 108	Data Structure Using C	3	1	4	25	75
BCA 110	Database Management System	3	1	4	25	75
PRACTICA	ALS					
BCA 152	Practical – III DS Lab	0	6	3	40	60
BCA 154	Practical – IV DBMS Lab	0	6	3	40	60
BCA 156*	Cyber Ethics	2	0	2	100	
	Total	17	16	27	305	495

\*NUES TOTAL MARKS: 800

#### THIRD SEMESTER EXAMINATION

Code No.	Paper	L	T/P	Credits	Marks Internal	Marks External
THEROY I	PAPERS		1			
BCA 201	Mathematics – III	3	1	4	25	75
BCA 203	Computer Architecture	3	1	4	25	75
BCA 205	Front End Design Tool VB.Net	3	1	4	25	75
BCA 207	Principles of Accounting	3	0	3	25	75
BCA 209	Object Oriented Programming using C++.	3	1	4	25	75
PRACTICA	ALS					
BCA 251	Practical – V .NET Lab	0	6	3	40	60
BCA 253	Practical – VI C++ Lab	0	6	3	40	60
BCA 255*	Software Development Skills	2	0	2	100	
	Total	17	16	27	305	495

\*NUES TOTAL MARKS: 800

### FOURTH SEMESTER EXAMINATION

Code No.	Paper	L	T/P	Credits	Marks Internal	Marks External
THEROY I	PAPERS					
BCA 202	Mathematics – IV	3	1	4	25	75
BCA 204	Web Technologies	3	1	4	25	75
BCA 206	Java Programming	3	1	4	25	75
BCA 208	Software Engineering	3	1	4	25	75
BCA 210	Computer Networks	3	1	4	25	75
PRACTICA	ALS					
BCA 252	Practical – VII Java Lab	0	6	3	40	60
BCA 254	Practical – VIII Web Tech Lab	0	6	3	40	60
BCA	Personality	2	0	2	100	
256*	Development Skills					
	Total	17	13	28	305	495

#### \*NUES TOTAL MARKS: 800

Summer Training will be held for 4 weeks after the end of fourth semester. Viva-Voce will be conducted in fifth semester.

### FIFTH SEMESTER EXAMINATION

Code No.	Paper	L	T/P	Credits	Marks Internal	Marks External
THEROY I	PAPERS					
BCA 301	Operating System	3	1	4	25	75
BCA 303	Computer Graphics	3	1	4	25	75
BCA 305	E- Commerce	3	1	4	25	75
***ELECT	IVES (Select any One)					1
BCA 307	Software Testing	3	1	4	25	75
BCA 309	Microprocessor	3	1	4	25	75
BCA 311	Advance Computer Networks	3	1	4	25	75
BCA 313	Web Based Programming	3	1	4	25	75
BCA 315	Business Economics	3	1	4	25	75
PRACTICA	ALS					
BCA 351	Practical – IX CG Lab	0	8	4	40	60
BCA	Summer Project/	0	0	2	100	
355*	Training					
BCA 357	Minor Project		8	4	40	60
	Total	12	20	26	280	420

\*Evaluation will be based on Summer Training held after fourth semester and will be conducted by the college committee only.

\*\*\* Any Elective Subject will be offered if minimum 1/3 rd of the total strength of students in the class will opt for it.

\*\*NUES TOTAL MARKS: 700

Note : A Minimum of 40 Lectures is mandatory for each course. Syllabus of Bachelor of Computer Applications (BCA), approved by BCA Coordination Committee on 26<sup>th</sup> July 2011 & Sub-Committee Academic Council held 28<sup>th</sup> July 2011. W.e.f. academic session 2011-12

### SIXTH SEMESTER EXAMINATION

Code No.	Paper	L	T/P	Credits	Marks Internal	Marks External
THEROY I	PAPERS					
BCA 302	Data Ware Housing & Data Mining	3	1	4	25	75
BCA 304	Mobile Computing	3	1	4	25	75
BCA 306	Linux Environment	3	1	4	25	75
***ELECT	IVES (Select any One)				1	I
BCA 308	Multimedia & Its Applications	3	1	4	25	75
BCA 310	Bio Informatics	3	1	4	25	75
BCA 312	Artificial Intelligence	3	1	4	25	75
BCA 314	Network Security	3	1	4	25	75
BCA 316	Network Programming	3	1	4	25	75
PRACTICA	ALS					
BCA 352	Practical – X Linux Lab	0	4	2	40	60
BCA 356	Major Project		10	5	40	60
BCA 358**	Seminar	2	0	2	100	
	Total	14	18	25	280	420

#### Note:

- 1. The total number of the credits of the BCA programme = 160.
- 2. Each student shall be required to appear for examinations in all courses. However, for the award of the degree a student shall be required to earn the minimum of 150 credits.

#### **Total Marks : 700**

# \*\*\* Any Elective Subject will be offered if minimum 1/3 rd of the total strength of students in the class will opt for it.

Note : A Minimum of 40 Lectures is mandatory for each course.

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