

SCHEME OF EXAMINATION

&

SYLLABI

for

**Bachelor of Computer Applications Programmes of Studies under the
aegis of University School of Information Communication and
Technology offered at Affiliated Institutions of the University**

**(1st Year Common Scheme and Syllabus,
and 2nd year onwards framework)**

Applicable to

- 1. Bachelor of Computer Applications**
- 2. Bachelor of Computer Applications – Data Science**



University School of Information Communication and Technology

Sector 16C, Dwarka, Delhi – 110 078 [INDIA]

www.ipu.ac.in

First Semester						
Group	Code	Paper	L	P	Credits	Mode
¹ PC	BCA 101	Discrete Mathematics	4	-	4	Theory
¹ SEC	BCA 103	Programming Using 'C' Language	3	-	3	Theory
PC	BCA 105#	Fundamentals of Computers & IT	3	-	3	Theory
SEC	BCA 107#	Web Technologies	3	-	3	Theory
AEC	BCA 109	Technical Communication	3	-	3	Theory
VAC	BCA 111+	Human Values and Ethics	2	-	2	Theory
¹ SEC	BCA 171	Programming Using 'C' Language Lab	-	4	2	Practical
¹ PC	BCA 173	Fundamentals of Computers & IT Lab	-	3	1	Practical
SEC	BCA 175	Web Technologies Lab	-	3	1	Practical
Total			18	10	22	
Bridge Course (Mandatory for Students from Non Mathematics background)						
BC	BCA 181+	Bridge Course in Mathematics	4	0	0	

+ Non Credit subject mandatory for the students who do not have mathematics in 12th Std. The student has to obtain at least 40 marks. The examination of this paper shall be conducted by the concerned teacher teaching the course / paper as Teacher's Continuous Evaluation for total 100 marks. Only the pass or fail status is to be specified on the marksheet of examination and the result of the student. Passing in this paper is mandatory for the student.

Generic Elective (GE) for other undergraduate programmes

¹Mandatory paper to be passed for the award of the degree.

Group	Code	Paper	L	P	Credits
HS/MS	HS-352	NSS / NCC / Cultural Clubs / Technical Society / Technical Club*			2

***NUES:** Comprehensive evaluation of the students by the concerned coordinator of NCC / NSS / Cultural Clubs / Technical Society / Technical Clubs, out of 100 as per the evaluation schemes worked out by these activity societies, organizations; the co-ordinators shall be responsible for the evaluation of the same. These activities shall start from the 1st semester and the evaluation shall be conducted at the end of the 6th semester for students admitted in the first semester. Students admitted in the 2nd year (3rd semester) as lateral entry shall be for the period of 3rd semester to 6th semester only

Second Semester						
Group	Code	Paper	L	P	Credits	Mode
PC	BCA 102	Applied Mathematics	4	-	4	Theory
SEC	BCA 104	Web based Programming	3	-	3	Theory
¹ PC	BCA 106#	Data Structure And Algorithms Using 'C'	4	-	4	Theory
¹ PC	BCA 108#	Database Management System	4	-	4	Theory
VAC	BCA 110	Environment Studies	2	-	2	Theory

SEC	BCA 112 BCA 114 BCA 116	Choose any one (Skill Enhancement Course) Front End Design Tool VB.Net Lab Statistical Analysis using Excel Design Laboratory using Photoshop	-	2	1	Practical
SEC	BCA 172	Web based Programming Lab	-	2	1	Practical
¹ PC	BCA 174	Data Structure And Algorithm Using 'C' Lab	-	4	2	Practical
¹ PC	BCA 176	Database Management System Lab	-	2	1	Practical
Total			17	10	22	

Generic Elective (GE) for other undergraduate programmes

¹Mandatory paper to be passed for the award of the degree.