

**PROPOSED SCHEME OF INSTRUCTION**  
**BACHELOR OF COMPUTER APPLICATIONS (BCA)**  
**SEMESTER-V**

SNo	Course Code	Course Title	Category	Hours/Week		No of Credits	Scheme of Examination		
				L	P		Max Marks	Duration (hrs)	
THEORY				L	P		SEE	CIE	SEE
1	ETC501	Parallel Programming	ETC	4	-	4	70	30	3
2	ETC502	Big Data Analytics	ETC	4	-	4	70	30	3
3	ETC503	Software Quality and Testing	ETC	4	-	4	70	30	3
4	MC504	Environmental Science	MC	4	-	Non Credit	70	30	3
<b>Professional Elective I</b>			<b>PEC</b>	<b>4</b>	<b>-</b>	<b>4</b>	<b>70</b>	<b>30</b>	<b>3</b>
4a	PEC511	Advanced Java Programming							
4b	PEC512	Programming using C# and ASP.NET							
4c	PEC513	Internet Programming using PHP							
PRACTICALS									
6	LTC551	Big Data Analytics Hadoop Lab	LTC	-	4	2	50	25	3
7	LPC552	Professional Elective-I Lab	LPC	-	4	2	50	25	3
8	LCC553	Project Phase I	LCC	-	4	2	50	25	3
<b>Total</b>				<b>20</b>	<b>12</b>	<b>22</b>	<b>500</b>	<b>225</b>	<b>-</b>

Abbreviation	Full Form	Abbreviation	Full Form
BSC	Basic Science Course	LTC	Laboratory Technological Course
PCC	Professional Core Course	LPC	Laboratory Professional Course
ETC	Emerging Technological Course	LHC	Laboratory Humanities Course
HSC	Humanities and Social Science Course	CIE	Continuous Internal Evaluation
MGC	Management Course	SEE	Semester End Evaluation
PEC	Professional Elective Course	L	Lecture
LCC	Laboratory Core Course	P	Practical