



**ARKA JAIN University**  
Jharkhand (Jamshedpur)

Recognized by **UGC**  
Approved by **AICTE**

Scheme of Study of the Program

**Bachelor of Computer Applications (BCA)**

Semester I,II,III,IV,V & VI

(w.e.f batch 2017)

**SEMESTER-I**

S.No	Name of the Subject	Credit	Contact Hours Per Week	Total Marks	End Term Theory/ Practical Exam	Mid Term Theory/ Practical Exam	CIA **	Attendance
1	*Introduction to Computer Science	4	4	100	70	20	5	5
2	*Programming In C	4	4	100	70	20	5	5
3	*Discrete Mathematics	4	4	100	70	20	5	5
4	∞Business Communication I	4	4	100	70	20	5	5
5	∞ Hindi	2	2	50	35	10	2.5	2.5
6	» IT Awareness - I	2	2	50	35	10	2.5	2.5
	<b>Practical</b>							
7	* Computer Science - Lab	2	4	50	30	10	5	5
8	* Programming In C - Lab	2	4	50	30	10	5	5
	<b>TOTAL</b>	<b>24</b>	<b>28</b>	<b>600</b>	<b>410</b>	<b>120</b>	<b>35</b>	<b>35</b>

**SEMESTER-II**

S.No	Name of the Subject	Credit	Contact Hours Per Week	Total Marks	End Term Theory/ Practical Exam	Mid Term Theory/ Practical Exam	CIA **	Attendance
1	* Data Structure through C	4	4	100	70	20	5	5
2	* Object Oriented Programming with C++	4	4	100	70	20	5	5
3	* Operating System	4	4	100	70	20	5	5
4	* Numerical & Statistical Methods	4	4	100	70	20	5	5
5	∞ English	2	2	50	35	10	2.5	2.5
6	» IT Awareness - II	2	2	50	35	10	2.5	2.5
	<b>Practical</b>							
7	* Data Structure through C - Lab	2	4	50	30	10	5	5
8	* Object Oriented Programming with C++ - Lab	2	4	50	30	10	5	5
9	* Operating System - Lab	2	4	50	30	10	5	5
	<b>TOTAL</b>	<b>26</b>	<b>32</b>	<b>650</b>	<b>440</b>	<b>130</b>	<b>40</b>	<b>40</b>

**SEMESTER-III**

S.No	Name of the Subject	Credit	Contact Hours Per Week	Total Marks	End Term Theory/ Practical Exam	Mid Term Theory/ Practical Exam	CIA **	Attendance
1	*Programming with Java	4	4	100	70	20	5	5
2	*Design and Analysis of Algorithms	4	4	100	70	20	5	5
3	*Digital Electronics	4	4	100	70	20	5	5
4	*Database Management System	4	4	100	70	20	5	5
5	*Data Communication & Networking	4	4	100	70	20	5	5
6	»Python Programming	4	4	100	70	20	5	5
	<b>Practical</b>							
7	*Programming with Java -Lab	2	4	50	30	10	5	5
8	*Database Management System -Lab	2	4	50	30	10	5	5
9	»PythonProgramming -Lab	2	4	50	30	10	5	5
	<b>TOTAL</b>	<b>30</b>	<b>36</b>	<b>750</b>	<b>510</b>	<b>150</b>	<b>45</b>	<b>45</b>

**SEMESTER-IV**

S.No	Name of the Subject	Credit	Contact Hours Per Week	Total Marks	End Term Theory/ Practical Exam	Mid Term Theory/ Practical Exam	CIA **	Attendance
1	* Web Programming	4	4	100	70	20	5	5
2	* Computer Graphics and Animation	4	4	100	70	20	5	5
3	* Software Engineering	4	4	100	70	20	5	5
4	» Mobile Application Development	4	4	100	70	20	5	5
5	∞ Financial Accounting	4	4	100	70	20	5	5
	<b>Practical</b>							
6	* Web Programming - Lab	2	4	50	30	10	5	5
7	* Computer Graphics and Animation - Lab	2	4	50	30	10	5	5
8	» Mobile Application Development - Lab	2	4	50	30	10	5	5
	<b>TOTAL</b>	<b>26</b>	<b>32</b>	<b>650</b>	<b>440</b>	<b>130</b>	<b>40</b>	<b>40</b>

**Semester V**

S.No	Name of the Subject	Credit	Contact Hours Per Week	Total Marks	End Term Theory/ Practical Exam	Mid Term Theory/ Practical Exam	CIA **	Attendance
1	* Software Project Management	4	4	100	70	20	5	5
2	»Internet of Things	4	4	100	70	20	5	5
3	»Advanced Web Programming	4	4	100	70	20	5	5
4	<b><u>Discipline Specific Elective (any One)</u></b> Artificial Intelligence Linux System Administration	4	4	100	70	20	5	5
5	<b><u>Discipline Specific Elective (any One)</u></b> Enterprise Java Next Generation Technologies	4	4	100	70	20	5	5
	<b>Practical</b>							
6	»Internet of Things -Lab	2	4	50	30	10	5	5
7	»Advanced Web Programming -Lab	2	4	50	30	10	5	5
8	<b><u>Discipline Specific Elective (any One)</u></b> Ⓓ Artificial Intelligence - Lab Ⓓ Linux System Administration - Lab	2	4	50	30	10	5	5
9	<b><u>Discipline Specific Elective (any One)</u></b> Ⓓ Enterprise Java - Lab Ⓓ Next Generation Technologies - Lab	2	4	50	30	10	5	5
	<b>TOTAL</b>	<b>28</b>	<b>36</b>	<b>700</b>	<b>470</b>	<b>140</b>	<b>45</b>	<b>45</b>

## Semester VI

S.No	Name of the Subject	Credit	Contact Hours Per Week	Total Marks	End Term Theory/ Practical Exam	Mid Term Theory/ Practical Exam	CIA **	Attendance
1	»Software Quality Assurance	4	4	100	70	20	5	5
2	»Security in Computing	4	4	100	70	20	5	5
3	»Business Intelligence	4	4	100	70	20	5	5
4	∞Cloud Computing	4	4	100	70	20	5	5
5	<b><u>Discipline Specific Elective (any One)</u></b> ⤵ IT Service Management ⤵ Cyber Laws	4	4	100	70	20	5	5
	<b>Practical</b>							
6	»Project	4	4	100	50	40	5	5
7	»Security in Computing - Lab	2	4	50	30	10	5	5
8	»Business Intelligence Practical-Lab	2	4	50	30	10	5	5
	<b>TOTAL</b>	<b>28</b>	<b>32</b>	<b>700</b>	<b>460</b>	<b>160</b>	<b>40</b>	<b>40</b>

### **\*\* CIA – Continuous Internal Assessment – Based on Class Participation / Assignment**

\* CoreSubjects | ▲ Generic Subjects | »SkillEnhancementSubjects |  
∞AbilityEnhancement Subjects | ⤵ Discipline Specific Elective

Note: Approved by BOS on dated 11.08.2017 & Approved by Academic Council on Dated 17.08.2017