

School of Computer Applications

BBD University, Lucknow

Scheme of Evaluation & Course Structure

Bachelor of Computer Applications (BCA) 3 Years Full Time

I Year, I Semester

| S. No. | Subject Code | Subject Name | Weightage | Credit (cu) | Periods | | | Evaluation Scheme | | | | | Subject Total | |
|-------------------------------|--------------|-------------------------------|-----------|-------------|---------|----|---|-------------------|----|----|-------|----------|---------------|------|
| | | | | | L | T | P | Internal | | | | External | | |
| | | | | | | | | ST | TA | AT | Total | ESE | | |
| Theory | | | | | | | | | | | | | | |
| 1 | BCA-T111 | Computer Fundamental | Full | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 | |
| 2 | BCA-T112 | Programming Concept Using 'C' | Full | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 | |
| 3 | BCA-T113 | Digital Electronics | Full | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 | |
| 4 | BCA-T114 | Mathematics I | Full | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 | |
| 5 | BCA-T115 | Professional Communication | Half | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 | |
| Practical | | | | | | | | | | | | | | |
| 6 | BCA-P111 | 'C' Programming Lab | Full | 2 | 0 | 0 | 4 | 30 | 10 | 10 | 50 | 50 | 100 | |
| 7 | BCA-P112 | Digital Electronics Lab | Full | 2 | 0 | 0 | 4 | 30 | 10 | 10 | 50 | 50 | 100 | |
| 8 | BCA-P113 | Seminar/Term Paper | Half | 1 | 0 | 0 | 2 | 25 | 0 | 0 | 25 | 25 | 50 | |
| 9 | GP-101 | General Proficiency | - | 1 | - | - | - | - | - | - | 50 | - | 50 | |
| Sub Total (I Semester) | | | | | 26 | 15 | 5 | 10 | | | | | | 1050 |

I Year, II Semester

| S. No. | Subject Code | Subject Name | Weightage | Credit (cu) | Periods | | | Evaluation Scheme | | | | | Subject Total | |
|--------------------------------|--------------|--------------------------------------|-----------|-------------|---------|----|---|-------------------|----|----|-------|----------|---------------|------|
| | | | | | L | T | P | Internal | | | | External | | |
| | | | | | | | | ST | TA | AT | Total | ESE | | |
| Theory | | | | | | | | | | | | | | |
| 1 | BCA-T121 | Data Structure Using 'C' | Full | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 | |
| 2 | BCA-T122 | Operating System | Full | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 | |
| 3 | BCA-T123 | System Analysis & Design | Full | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 | |
| 4 | BCA-T124 | Mathematics II | Full | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 | |
| 5 | BCA-T125 | Computer Architecture & Organization | Full | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 | |
| Practical | | | | | | | | | | | | | | |
| 6 | BCA-P121 | Data Structure Using 'C' Lab | Full | 2 | 0 | 0 | 4 | 30 | 10 | 10 | 50 | 50 | 100 | |
| 7 | BCA-P122 | Computer Organization Lab | Full | 2 | 0 | 0 | 4 | 30 | 10 | 10 | 50 | 50 | 100 | |
| 8 | BCA-P123 | Seminar/Term Paper | Half | 1 | 0 | 0 | 2 | 25 | 0 | 0 | 25 | 25 | 50 | |
| 9 | GP-201 | General Proficiency | - | 1 | - | - | - | - | - | - | 50 | - | 50 | |
| Sub Total (II Semester) | | | | | 26 | 15 | 5 | 10 | | | | | | 1050 |
| Sub Total (I Semester) | | | | | 26 | | | | | | | | 1050 | |
| Total (I Year) | | | | | 52 | | | | | | | | 2100 | |

Legends: cu: Credit Unit; L: Lecture; T: Tutorial; P: Practical; ST: Sessional Test; TA: Teacher's Assessment; AT: Attendance; ESE: End Semester Examination

School of Computer Applications

BBD University, Lucknow

Scheme of Evaluation & Course Structure

Bachelor of Computer Applications (BCA) 3 Years Full Time

II Year, III Semester

| S. No. | Subject Code | Subject Name | Weightage | Credit (cu) | Periods | | | Evaluation Scheme | | | | | Subject Total | |
|---------------------------------|--------------|--|-----------|-------------|---------|----|---|-------------------|----|----|-------|----------|---------------|------|
| | | | | | L | T | P | Internal | | | | External | | |
| | | | | | | | | ST | TA | AT | Total | ESE | | |
| Theory | | | | | | | | | | | | | | |
| 1 | BCA-T231 | Design & Analysis of Algorithm | Full | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 | |
| 2 | BCA-T232 | Data Base Management System | Full | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 | |
| 3 | BCA-T233 | Object Oriented Programming Using C++ | Full | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 | |
| 4 | BCA-T234 | Computer Communication & Computer Networks | Full | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 | |
| 5 | BCA-T235 | Discrete Mathematics | Full | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 | |
| Practical | | | | | | | | | | | | | | |
| 6 | BCA-P231 | Data Base Management System Lab | Full | 2 | 0 | 0 | 4 | 30 | 10 | 10 | 50 | 50 | 100 | |
| 7 | BCA-P232 | Object Oriented Programming Using C++ Lab | Full | 2 | 0 | 0 | 4 | 30 | 10 | 10 | 50 | 50 | 100 | |
| 8 | BCA-P233 | Seminar/Term Paper | Half | 1 | 0 | 0 | 2 | 25 | 0 | 0 | 25 | 25 | 50 | |
| 9 | GP-301 | General Proficiency | - | 1 | - | - | - | - | - | - | 50 | - | 50 | |
| Sub Total (III Semester) | | | | | 26 | 15 | 5 | 10 | | | | | | 1050 |

II Year, IV Semester

| S. No. | Subject Code | Subject Name | Weightage | Credit (cu) | Periods | | | Evaluation Scheme | | | | | Subject Total | |
|---------------------------------|--------------|------------------------------------|-----------|-------------|---------|----|---|-------------------|----|----|-------|----------|---------------|------|
| | | | | | L | T | P | Internal | | | | External | | |
| | | | | | | | | ST | TA | AT | Total | ESE | | |
| Theory | | | | | | | | | | | | | | |
| 1 | BCA-T241 | Unix & Shell Programming | Full | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 | |
| 2 | BCA-T242 | Numerical & Statistical Techniques | Full | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 | |
| 3 | BCA-T243 | Internet & Java Programming | Full | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 | |
| 4 | BCA-T244 | Software Engineering | Full | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 | |
| 5 | BCA-T245 | Computer Graphics & Multimedia | Full | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 | |
| Practical | | | | | | | | | | | | | | |
| 6 | BCA-P241 | Unix & Shell Programming Lab | Full | 2 | 0 | 0 | 4 | 30 | 10 | 10 | 50 | 50 | 100 | |
| 7 | BCA-P242 | Internet & Java Programming Lab | Full | 2 | 0 | 0 | 4 | 30 | 10 | 10 | 50 | 50 | 100 | |
| 8 | BCA-P243 | Seminar/Term Paper | Half | 1 | 0 | 0 | 2 | 25 | 0 | 0 | 25 | 25 | 50 | |
| 9 | GP-401 | General Proficiency | - | 1 | - | - | - | - | - | - | 50 | - | 50 | |
| Sub Total (IV Semester) | | | | | 26 | 15 | 5 | 10 | | | | | | 1050 |
| Sub Total (III Semester) | | | | | 26 | | | | | | | | 1050 | |
| Total (II Year) | | | | | 52 | | | | | | | | 2100 | |

Legends: cu: Credit Unit; L: Lecture; T: Tutorial; P: Practical; ST: Sessional Test; TA: Teacher's Assessment; AT: Attendance; ESE: End Semester Examination

School of Computer Applications

BBD University, Lucknow

Scheme of Evaluation & Course Structure

Bachelor of Computer Applications (BCA) 3 Years Full Time

III Year, V Semester

| S. No. | Subject Code | Subject Name | Weightage | Credit (cu) | Periods | | | Evaluation Scheme | | | | | Subject Total |
|-------------------------------|--------------|---------------------------------|-----------|-------------|---------|----|---|-------------------|----|----|----------|-----|---------------|
| | | | | | L | T | P | Internal | | | External | | |
| | | | | | | | | ST | TA | AT | Total | ESE | |
| Theory | | | | | | | | | | | | | |
| 1 | BCA-T351 | .Net Framework & C# | Full | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 |
| 2 | BCA-T352 | Web Application Development | Full | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 |
| 3 | BCA-T353 | Fundamentals of E-Commerce | Full | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 |
| 4 | BCA-T354 | Information Systems | Full | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 |
| 5 | BCA-T355 | Optimization Technique | Full | 4 | 3 | 1 | 0 | 30 | 10 | 10 | 50 | 100 | 150 |
| Practical | | | | | | | | | | | | | |
| 6 | BCA-P351 | .Net Framework & C# Lab | Full | 2 | 0 | 0 | 4 | 30 | 10 | 10 | 50 | 50 | 100 |
| 7 | BCA-P352 | Web Application Development Lab | Full | 2 | 0 | 0 | 4 | 30 | 10 | 10 | 50 | 50 | 100 |
| 8 | BCA-P353 | Seminar/Term Paper | Half | 1 | 0 | 0 | 2 | 25 | 0 | 0 | 25 | 25 | 50 |
| 9 | GP-501 | General Proficiency | - | 1 | 1 | - | - | - | - | - | 50 | - | 50 |
| Sub Total (V Semester) | | | | | 26 | 15 | 5 | 10 | | | | | 1050 |

III Year, VI Semester

| S. No. | Subject Code | Subject Name | Weightage | Credit (cu) | Evaluation Scheme | | | | Subject Total |
|--------------------------------------|--------------|---------------------------------|-----------|-------------|-------------------|-----|-------|----------------|---------------|
| | | | | | Internal | | | External | |
| | | | | | MSP | IE | Total | FP & Viva-voce | |
| 1 | BCA-P361 | Industrial Training-cum-Project | - | 26 | 300 | 200 | 500 | 500 | 1000 |
| 2 | GP-601 | General Proficiency | - | 1 | - | - | 50 | - | 50 |
| Sub Total (VI Semester) | | | | 27 | | | | | 1050 |
| Sub Total (V Semester) | | | | 26 | | | | | 1050 |
| Total (III Year) | | | | 53 | | | | | 2100 |
| Total (II Year) | | | | 52 | | | | | 2100 |
| Total (I Year) | | | | 52 | | | | | 2100 |
| Grand Total (I, II, III Year) | | | | 157 | | | | | 6300 |

Legends: cu: Credit Unit; L: Lecture; T: Tutorial; P: Practical; ST: Sessional Test; TA: Teacher's Assessment; AT: Attendance; ESE: End Semester Examination; MSP: Mid Sem Presentation; IE: Industry Evaluation; FP: Final Presentation

Babu Banarasi Das University, Lucknow
School of Computer Applications
Bachelor of Computer Applications
Evaluation Scheme

| SEMESTER I | | | | | | | | | |
|------------------------|--------------------|-------------------------------|----------------------|----------|----------|--------------------------|------------|---------------------|----------------|
| Course Category | Course Code | Course Title | Contact Hours | | | Evaluation Scheme | | | Credits |
| | | | L | T | P | CIA | ESE | Course Total | |
| Theory | | | | | | | | | |
| F | BCA2101 | Computer Fundamental | 3 | 1 | 0 | 40 | 60 | 100 | 4 |
| C | BCA2102 | Programming Concept Using 'C' | 3 | 1 | 0 | 40 | 60 | 100 | 4 |
| F | BCA2103 | Digital Electronics | 3 | 1 | 0 | 40 | 60 | 100 | 4 |
| C | BCA2104 | Mathematics I | 3 | 1 | 0 | 40 | 60 | 100 | 4 |
| C | BCA2105 | Professional Communication | 3 | 1 | 0 | 40 | 60 | 100 | 4 |
| Practical | | | | | | | | | |
| C | BCA2151 | 'C' Programming Lab | 0 | 0 | 4 | 40 | 60 | 100 | 2 |
| C | BCA2152 | Digital Electronics Lab | 0 | 0 | 4 | 40 | 60 | 100 | 2 |
| C | BCA2153 | Seminar/Term Paper | 0 | 0 | 2 | 100 | 0 | 100 | 1 |
| | GP2101 | General Proficiency | - | - | - | - | - | 100 | 1 |
| Total | | | 15 | 5 | 10 | | | 900 | 26 |

| SEMESTER II | | | | | | | | | |
|------------------------|--------------------|--------------------------------------|----------------------|----------|----------|--------------------------|------------|---------------------|----------------|
| Course Category | Course Code | Course Title | Contact Hours | | | Evaluation Scheme | | | Credits |
| | | | L | T | P | CIA | ESE | Course Total | |
| Theory | | | | | | | | | |
| C | BCA2201 | Data Structure Using 'C' | 3 | 1 | 0 | 40 | 60 | 100 | 4 |
| C | BCA2202 | Operating System | 3 | 1 | 0 | 40 | 60 | 100 | 4 |
| C | BCA2203 | System Analysis & Design | 3 | 1 | 0 | 40 | 60 | 100 | 4 |
| F | BCA2204 | Mathematics II | 3 | 1 | 0 | 40 | 60 | 100 | 4 |
| C | BCA2205 | Computer Organization & Architecture | 3 | 1 | 0 | 40 | 60 | 100 | 4 |
| Practical | | | | | | | | | |
| C | BCA2251 | Data Structure Using 'C' Lab | 0 | 0 | 4 | 40 | 60 | 100 | 2 |
| C | BCA2252 | Computer Organization Lab | 0 | 0 | 4 | 40 | 60 | 100 | 2 |
| C | BCA2253 | Seminar/Term Paper | 0 | 0 | 2 | 100 | 0 | 100 | 1 |
| | GP2201 | General Proficiency | - | - | - | - | - | 100 | 1 |
| Total | | | 15 | 5 | 10 | | | 900 | 26 |

| SEMESTER III | | | | | | | | | |
|------------------------|--------------------|--|----------------------|----------|----------|--------------------------|------------|---------------------|----------------|
| Course Category | Course Code | Course Title | Contact Hours | | | Evaluation Scheme | | | Credits |
| | | | L | T | P | CIA | ESE | Course Total | |
| Theory | | | | | | | | | |
| C | BCA2301 | Design & Analysis of Algorithm | 3 | 1 | 0 | 40 | 60 | 100 | 4 |
| C | BCA2302 | Data Base Management System | 3 | 1 | 0 | 40 | 60 | 100 | 4 |
| C | BCA2303 | Object Oriented Programming Using C++ | 3 | 1 | 0 | 40 | 60 | 100 | 4 |
| C | BCA2304 | Computer Communication & Computer Networks | 3 | 1 | 0 | 40 | 60 | 100 | 4 |
| C | BCA2305 | Discrete Mathematics | 3 | 1 | 0 | 40 | 60 | 100 | 4 |
| Practical | | | | | | | | | |
| C | BCA2351 | Data Base Management System Lab | 0 | 0 | 4 | 40 | 60 | 100 | 2 |
| C | BCA2352 | Object Oriented Programming Using C++ Lab | 0 | 0 | 4 | 40 | 60 | 100 | 2 |
| C | BCA2353 | Seminar/Term Paper | 0 | 0 | 2 | 100 | 0 | 100 | 1 |
| | GP2301 | General Proficiency | - | - | - | - | - | 100 | 1 |
| Total | | | 15 | 5 | 10 | | | 900 | 26 |

| SEMESTER IV | | | | | | | | | |
|------------------------|--------------------|------------------------------------|----------------------|----------|----------|--------------------------|------------|---------------------|----------------|
| Course Category | Course Code | Course Title | Contact Hours | | | Evaluation Scheme | | | Credits |
| | | | L | T | P | CIA | ESE | Course Total | |
| Theory | | | | | | | | | |
| C | BCA2401 | Unix & Shell Programming | 3 | 1 | 0 | 40 | 60 | 100 | 4 |
| C | BCA2402 | Numerical & Statistical Techniques | 3 | 1 | 0 | 40 | 60 | 100 | 4 |
| C | BCA2403 | Internet & Java Programming | 3 | 1 | 0 | 40 | 60 | 100 | 4 |
| C | BCA2404 | Software Engineering | 3 | 1 | 0 | 40 | 60 | 100 | 4 |
| C | BCA2405 | Environmental Studies | 2 | 0 | 0 | 40 | 60 | 100 | 2 |
| Practical | | | | | | | | | |
| C | BCA2451 | Unix & Shell Programming Lab | 0 | 0 | 4 | 40 | 60 | 100 | 2 |
| C | BCA2452 | Internet & Java Programming Lab | 0 | 0 | 4 | 40 | 60 | 100 | 2 |
| C | BCA2453 | Seminar/Term Paper | 0 | 0 | 2 | 100 | 0 | 100 | 1 |
| | GP2401 | General Proficiency | - | - | - | - | - | 100 | 1 |
| Total | | | 14 | 4 | 10 | | | 900 | 24 |

| SEMESTER V | | | | | | | | | |
|------------------|-------------|---------------------------------|---------------|---|----|-------------------|-----|--------------|---------|
| Course Category | Course Code | Course Title | Contact Hours | | | Evaluation Scheme | | | Credits |
| | | | L | T | P | CIA | ESE | Course Total | |
| Theory | | | | | | | | | |
| C | BCA2501 | .Net Framework & C# | 3 | 1 | 0 | 40 | 60 | 100 | 4 |
| C | BCA2502 | Web Application Development | 3 | 1 | 0 | 40 | 60 | 100 | 4 |
| GE | | Generic Elective | 3 | 1 | 0 | 40 | 60 | 100 | 4 |
| C | BCA2504 | Management Information Systems | 3 | 1 | 0 | 40 | 60 | 100 | 4 |
| OE | | Open Elective | 3 | 1 | 0 | 40 | 60 | 100 | 4 |
| Practical | | | | | | | | | |
| C | BCA2551 | .Net Framework & C# Lab | 0 | 0 | 4 | 40 | 60 | 100 | 2 |
| C | BCA2552 | Web Application Development Lab | 0 | 0 | 4 | 40 | 60 | 100 | 2 |
| C | BCA2553 | Seminar/Term Paper | 0 | 0 | 2 | 100 | 0 | 100 | 1 |
| | GP2501 | General Proficiency | - | - | - | - | - | 100 | 1 |
| Total | | | 15 | 5 | 10 | | | 900 | 26 |

| SEMESTER VI | | | | | | |
|-----------------|-------------|---------------------------------|-------------------|-----|--------------|---------|
| Course Category | Course Code | Course Title | Evaluation Scheme | | | Credits |
| | | | CIA | ESE | Course Total | |
| C | BCA2651 | Industrial Training-cum-Project | 320 | 480 | 800 | 25 |
| | GP2601 | General Proficiency | - | - | 100 | 1 |
| Total | | | | | 900 | 26 |

Legends:

- L Number of Lecture Hours per week
- T Number of Tutorial Hours per week
- P Number of Practical Hours per week
- CIA Continuous Internal Assessment
- ESE End Semester Examination

| Course Category | Semester | | | | | | Total Credits | %age |
|--|----------|----|-----|----|----|----|---------------|------|
| | I | II | III | IV | V | VI | | |
| Basic Sciences | 4 | 4 | | | | | 8 | 5 |
| Humanities | 4 | | | 2 | | | 6 | 3.8 |
| Social Sciences | | | | | | | | |
| Professional Subject - Core | 17 | 21 | 25 | 21 | 17 | | 101 | 66.2 |
| Professional Subject – Generic Elective | | | | | 4 | | 4 | 2.5 |
| Professional Subject – Open Elective | | | | | 4 | | 4 | 2.5 |
| Project Work, Seminar and/or Internship in Industry or elsewhere | 1 | 1 | 1 | 1 | 1 | 26 | 31 | 20 |
| Total | 26 | 26 | 26 | 24 | 26 | 26 | 154 | 100 |

Credit Summary Chart

Category of Courses:

- F Foundation Course
- C Core Course
- GE Generic Elective
- OE Open Elective

Discipline wise Credit Summary Chart

| Course Category | Semester | | | | | | Total Credits | %age |
|-----------------|----------|----|-----|----|----|----|---------------|------|
| | I | II | III | IV | V | VI | | |
| F | 8 | 4 | | | | | 12 | 7.7 |
| C | 18 | 22 | 26 | 24 | 18 | 26 | 134 | 87.3 |
| GE | | | | | 4 | | 4 | 2.5 |
| OE | | | | | 4 | | 4 | 2.5 |
| Total | 26 | 26 | 26 | 24 | 26 | 26 | 154 | 100 |

Generic Elective Subjects List

1. BCA2511 Fundamental of E Commerce
2. BCA2512 Computer Graphics
3. BCA2513 Green Computing
4. BCA2514 E- governance

Open Elective Subjects List

1. BCA2515: Environmental Issues of IT & e-Waste Management
2. BCA2516: Digital Governance

