

COURSE STRUCTURE FOR MCA

FIRST SEMESTER

A. THEORY

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SL. | CODE |  | | THEORY |  |  | | CONTACTS | | |  |
| NO. |  |  | |  |  | (PERIODS/WEEK) | | | | | CREDITS |
|  |  |  | |  |  | L | | T | P | TOTAL |  |
| 1 | MCA101 | Computer Organisation & | | |  | 3 | | 1 | - | 4 | 4 |
|  |  | Architecture | | |  |  | |  |  |  |  |
| 2 | MCA102 | Business Systems and | | |  | 3 | | 1 | - | 4 | 4 |
|  |  | Applications | | |  |  | |  |  |  |  |
| 3 | MCA103 | Computer Programming with C | | |  | 3 | | 1 | - | 4 | 4 |
| 4 | MCA104 | Discrete Mathematical Structure | | |  | 3 | | 1 | - | 4 | 4 |
| 5 | MCA105 | Business English and | | |  | 3 | | 1 | - | 4 | 4 |
|  |  | Communication | | |  |  | |  |  |  |  |
|  |  |  | | Total of Theory |  |  | |  |  | 20 | 20 |
| B. PRACTICAL/SESSIONAL | | | | | | | | | | | |
| 6 | MCA191 | | Micro | Programming | & | - | | - | 4 | 4 | 3 |
|  |  | | Architecture Lab | |  |  | |  |  |  |  |
| 7 | MCA192 | | Programming lab (C) | |  | - | | - | 4 | 4 | 3 |
| 8 | MCA181 | | Seminar-1 | |  | - | | - | 4 | 4 | 3 |
| 9 | MCA(GS)181 | | General Studies - I | | | 3 | | 1 | 0 | 4 | 4 |
| Total of Practical/Sessional | | | | | | | | | | 16 | 13 |
|  |  |  | | Total of Semester | | |  |  | 36 |  | 33 |



COURSE STRUCTURE FOR MCA

SECOND SEMESTER

A. THEORY

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SL. | CODE | THEORY | |  | CONTACTS | | |  |
| NO. |  |  | | (PERIODS/WEEK) | | | | CREDITS |
|  |  |  | | L | T | P | TOTAL |  |
| 1 | MCA201 | Data Communication & Computer | | 3 | 1 | - | 4 | 4 |
|  |  | Networks | |  |  |  |  |  |
| 2 | MCA202 | Information Systems Analysis & | | 3 | 1 | - | 4 | 4 |
|  |  | Design | |  |  |  |  |  |
| 3 | MCA203 | Data Structures with C | | 3 | 1 | - | 4 | 4 |
| 4 | MCA204 | Data Base Management System I | | 3 | 1 | - | 4 | 4 |
| 5 | MCA205 | Object-Oriented Programming | | 3 | 1 | - | 4 | 4 |
|  |  | With C++ | |  |  |  |  |  |
|  |  | Total of Theory | |  |  |  | 20 | 20 |
| B. PRACTICAL/SESSIONAL | | | | | | | | |
| 6 | MCA293 | | Data structure lab | - | - | 4 | 4 | 3 |
| 7 | MCA294 | | Database lab | - | - | 4 | 4 | 3 |
| 8 | MCA295 | | Object-Oriented Programming lab in C++ | - | - | 4 | 4 | 3 |
| 9 | MCA(GS)281 | | General Studies - II | 3 | 1 | 0 | 4 | 4 |
|  |  | | Total of Practical/Sessional |  |  |  | 16 | 13 |
|  |  | | Total of Semester |  |  | 36 |  | 33 |



COURSE STRUCTURE FOR MCA

Third Semester

A. THEORY

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SL. | CODE | THEORY | |  | CONTACTS | | |  |
| NO. |  |  | | (PERIODS/WEEK) | | | | CREDITS |
|  |  |  | | L | T | P | TOTAL |  |
| 1 | MCA301 | Operating Systems and Systems | | 3 | 1 | - | 4 | 4 |
|  |  | Software | |  |  |  |  |  |
| 2 | MCA302 | Unix and Shell Programming | | 3 | 1 | - | 4 | 4 |
| 3 | MCA303 | Intelligent Systems | | 3 | 1 | - | 4 | 4 |
| 4 | MCA304 | Statistics and Numerical | | 3 | 1 | - | 4 | 4 |
|  |  | Techniques | |  |  |  |  |  |
| 5 | MCA305 | Business Management | | 2 | - | - | 2 | 2 |
| 6 | MCA306 | Management Accounting | | 2 | - | - | 2 | 2 |
|  |  | Total of Theory | |  |  |  | 20 | 20 |
| B. PRACTICAL/SESSIONAL | | | | | | | | |
| 7 | MCA391 | | Unix lab | - | - | 4 | 4 | 3 |
| 8 | MCA392 | | Statistics and Numerical Analysis | - | - | 4 | 4 | 3 |
|  |  | | lab |  |  |  |  |  |
| 9 | MCA393 | | Accounting Systems lab | - | - | 4 | 4 | 3 |
| 10 | MCA(GS)381 | | General Studies - III | 3 | 1 | 0 | 4 | 4 |
|  |  | | Total of Practical/Sessional |  |  |  | 16 | 13 |
|  |  | | Total of Semester |  |  | 36 |  | 33 |



COURSE STRUCTURE FOR MCA

Fourth Semester

A. THEORY

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SL. | CODE |  | | THEORY |  |  | CONTACTS | | |  |
| NO. |  |  | |  |  | (PERIODS/WEEK) | | | | CREDITS |
|  |  |  | |  |  | L | T | P | TOTAL |  |
| 1 | MCA401 | Software Engineering & TQM | | |  | 3 | 1 | - | 4 | 4 |
| 2 | MCA402 | Graphics & Multimedia | | |  | 3 | 1 | - | 4 | 4 |
| 3 | MCA403 | Data Base Management System II | | | | 3 | 1 | - | 4 | 4 |
| 4 | MCA404 | Operation | | Research | & | 3 | 1 | - | 4 | 4 |
|  |  | Optimisation Techniques | | |  |  |  |  |  |  |
| 5 | MCA405 | Environment and Ecology | | |  | 3 | - | - | 3 | 3 |
|  |  | Total of Theory | | |  |  |  |  | 19 | 19 |
| B. PRACTICAL/SESSIONAL | | | | | | | | | | |
| 6 | MCA491 | | Software Project Management lab | | | - | - | 4 | 4 | 3 |
| 7 | MCA492 | | Graphics & Multimedia Lab | |  | - | - | 4 | 4 | 3 |
| 8 | MCA493 | | Advanced Database lab | |  | - | - | 4 | 4 | 3 |
| 9 | MCA(GS)481 | | General Studies - IV | |  | 3 | 1 | 0 | 4 | 4 |
|  | Total of Practical/Sessional | | | | | | | | 16 | 13 |
|  |  | |  | Total of Semester | |  |  | 35 |  | 32 |



COURSE STRUCTURE FOR MCA

Fifth Semester

A. THEORY

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| SL. | CODE | THEORY |  | CONTACTS | | |  |
| NO. |  |  | (PERIODS/WEEK) | | | | CREDITS |
|  |  |  | L | T | P | TOTAL |  |
| 1 | MCA | Elective 1 | 3 | 1 | - | 4 | 4 |
|  | E501/A/B/C |  |  |  |  |  |  |
| 2 | MCA | Elective 2 | 3 | 1 | - | 4 | 4 |
|  | E502/A/B |  |  |  |  |  |  |
| 3 | MCA | Elective 3 | 3 | 1 | - | 4 | 4 |
|  | E503/A/B |  |  |  |  |  |  |
| 4 | MCA | Elective 4 | 3 | 1 | - | 4 | 4 |
|  | E504/A/B |  |  |  |  |  |  |
| 5 | MCA  E505/A/B | Values and Ethics of Profession | 3 | - | - | 3 | 3 |
|  |  | Total of Theory |  |  |  | 19 | 19 |
| B. PRACTICAL/SESSIONAL | | | | | | | |
| 6 | MCA591 | Minor project and seminar | - | - | 12 | 12 | 9 |
|  |  |  |  |  |  |  |  |
| 7 | MCA  E592/A/B | Elective 2 Lab | - | - | 4 | 4 | 3 |
| 8 | MCA(GS)581 | General Studies - V | 3 | 1 | 0 | 4 | 4 |  |
|  |  | Total of Practical/Sessional |  |  |  | 20 | 16 |
|  |  | Total of Semester |  |  | 39 |  | 35 |



COURSE STRUCTURE FOR MCA

Sixth Semester

A. THEORY

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| SL. CODE | | THEORY | CONTACTS | |
| NO. |  |  | (PERIODS/WEEK) CREDITS | |
|  |  |  | L T P TOTAL |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | 0 | 0 | - | 0 | 0 |
|  |  | Total of Theory |  |  |  | 0 | 0 |
| B. PRACTICAL | |  |  |  |  |  |  |
| 1 | MCA691 | Major project and seminar | - | - | 36 | 36 | 29 |
| 2 | MCA(GS)681 | General Studies - VI | 3 | 1 | 0 | 4 | 4 |  |
|  |  | Total of Practical |  |  |  | 40 | 33 |
|  |  | Total of Semester |  |  | 40 |  | 33 |

Electives for Semesters 5

|  |  |  |
| --- | --- | --- |
| Elective No | Course Code | Topic |
| 1 | MCA E501A | Distributed database management |
|  | MCA E501B | Image Processing |
|  | MCA E501C | Parallel Programming |
|  | MCA502A | System Administration and Linux |
|  | MCAE502B | Windows Programming With VB |
|  | MCA E504B | E-Commerce |
|  | MCA E501A | Distributed database management |
|  | MCA E501B | Image Processing |
|  |  | Paralle |

Summary

|  |  |  |
| --- | --- | --- |
| Semester No | Contact hr/wk | Credit |
| 1 | 32 | 29 |
| 2 | 32 | 29 |
| 3 | 32 | 29 |
| 4 | 31 | 28 |
| 5 | 35 | 31 |
| 6 | 36 | 29 |
| Total |  | 175 |