

MASTER OF COMPUTER APPLICATIONS (2008-2009)

| S. No | Semester | Category | Course Code | Title of the Course | Maximum Marks | | | Minimum Marks for Pass | | | Hours/Week | Credits |
|-------|----------|------------------|-------------|--|---------------|-----|-------|------------------------|-----|-------|------------|---------|
| | | | | | C.I.A | E.E | Total | C.I.A | E.E | Total | | |
| 1 | I | Core | 8P1CA1 | Mathematical Foundations of Computer Science | 25 | 75 | 100 | 10 | 30 | 40 | 5 | 4 |
| 2 | | Core | 8P1CA2 | Data Structures and Algorithms | 25 | 75 | 100 | 10 | 30 | 40 | | 54 |
| 3 | | Core | 8P1CA3 | Computer Fundamentals and Programming Techniques | 25 | 75 | 100 | 10 | 30 | 40 | 5 | 4 |
| 4 | | Core | 8P1CA4 | Organizational Behavior | 25 | 75 | 100 | 10 | 30 | 40 | 5 | 4 |
| 5 | | Core | 8P1CA5 | Computer Architecture | 25 | 75 | 100 | 10 | 30 | 40 | 4 | 4 |
| 6 | | Core-PL | 8P1CAP1 | Software Lab-Multimedia Lab | 40 | 60 | 100 | 16 | 24 | 40 | 3 | 2 |
| 7 | | Core-PL | 8P1CAP2 | Software Lab-II Data Structures Using C | 40 | 60 | 100 | 16 | 24 | 40 | 3 | 2 |
| 8 | | Skill Elective-I | 8P1CAS1 | Effective Communication Level-I | 40 | 60 | 100 | 16 | 24 | 40 | 3 | 2 |
| 9 | II | Core | 8P2CA6 | Computer Networks | 25 | 75 | 100 | 10 | 30 | 40 | 5 | 4 |
| 10 | | Core | 8P2CA7 | Object Oriented Programming with C++ | 25 | 75 | 100 | 10 | 30 | 40 | | 43 |
| 11 | | Core | 8P2CA8 | Operating System Design Principles | 25 | 75 | 100 | 10 | 30 | 40 | 5 | 4 |
| 12 | | Core | 8P2CA9 | Computer Graphics | 25 | 75 | 100 | 10 | 30 | 40 | 5 | 4 |
| 13 | | Core | 8P2CA10 | Optimization Techniques | 25 | 75 | 100 | 10 | 30 | 40 | 5 | 4 |
| 14 | | Core-PL | 8P2CAP3 | Software Lab -III C++ Graphics | 40 | 60 | 100 | 16 | 24 | 40 | 3 | 2 |
| 15 | | Core-PL | 8P2CAP4 | Software Lab-IV O.S.-Unix | 40 | 60 | 100 | 16 | 24 | 40 | 3 | 2 |
| 16 | | Skill Elective-I | 8P2CAS2 | Effective Communication Level-II | 40 | 60 | 100 | 16 | 24 | 40 | 3 | 2 |
| 17 | III | Core | 8P3CA11 | Advanced Java Programming | 25 | 75 | 100 | 10 | 30 | 40 | 4 | 4 |
| 18 | | Core | 8P3CA12 | Database Management System | 25 | 75 | 100 | 10 | 30 | 40 | 5 | 4 |
| 19 | | Core | 8P3CA13 | Internet and Web Technology | 25 | 75 | 100 | 10 | 30 | 40 | 5 | 4 |
| 20 | | Core | 8P3CA14 | Compiler Design | 25 | 75 | 100 | 10 | 30 | 40 | 5 | 4 |
| 21 | | Core | 8P3CA15 | Accounting and Financial Management | 25 | 75 | 100 | 10 | 30 | 40 | 5 | 4 |

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|------------------|----------|--------------------|----------------------|--|---------------------|-----|-------|------------------------|-----|-------|-------------|---------|
| | | | | | C.I.A | E.E | Total | C.I.A | E.E | Total | | |
| 22 | | Core-PL | 8P3CAP5 | Software Lab-V Web Technology | 40 | 60 | 100 | 16 | 24 | 40 | 3 | 2 |
| 23 | | Core-PL | 8P3CAP6 | Software Lab-VI Core Java | 40 | 60 | 100 | 16 | 24 | 40 | 3 | 2 |
| 24 | IV | Skill Elective-III | 8P3CAS3 | Personality Development | 40 | 60 | 100 | 16 | 24 | 40 | 3 | 2 |
| 25 | | Core | 8P4CA16 | Microprocessors and Their Applications | 25 | 75 | 100 | 10 | 30 | 40 | 5 | 4 |
| 26 | | Core | 8P4CA17 | Web services | 25 | 75 | 100 | 10 | 30 | 40 | 5 | 5 |
| 27 | | Core | 8P4CA18 | Advanced Software Engineering | 25 | 75 | 100 | 10 | 30 | 40 | 5 | 4 |
| 28 | | Elective-1 A/B | TCP/IP 8P4CAEB1 | Human Computer Interaction | 25 | 75 | 100 | 10 | 30 | 40 | 4 | 4 |
| 29 | | Elective-II A/B | 8P4CAEA2 8P4CAEB2 | Enterprise Resource Planning / Management Information System | 25 | 75 | 100 | 10 | 30 | 40 | 5 | 4 |
| 30 | IV | Core-PL | 8P4CAP7 | Software Lab VII Visual Programming | 40 | 60 | 100 | 16 | 24 | 40 | 3 | 2 |
| 31 | | Core -PL | 8P4CAP8 | Software Lab VIII RDBMS | 40 | 60 | 100 | 16 | 24 | 40 | 3 | 2 |
| 32 | | Skill-IV | 8P4CAS4 | Quality and Process Standards | 40 | 60 | 100 | 16 | 24 | 40 | 3 | 2 |
| 33 | V | Core | 8P5CA19 | Data Mining and Data Warehousing | 25 | 75 | 100 | 10 | 30 | 40 | 5 | 4 |
| 34 | | Core | 8P5CA20 | Real Time Systems | 25 | 75 | 100 | 10 | 30 | 40 | 5 | 4 |
| 35 | | Core | 8P5CA21 | Pervasive computing | 25 | 75 | 100 | 10 | 30 | 40 | 4 | 4 |
| 36 | | Elective -III A/B | 8P5CAEA3 8P5CAEB3 | Open source Technology / C# and Dot Net with AJAX Technology | 25 | 75 | 100 | 10 | 30 | 40 | 5 | 4 |
| 37 | | Elective -IV A/B | 8P5CAEA4 8P5CAEB4 | Introduction to Bio-Informatics / Distributed Technologies | 25 | 75 | 100 | 10 | 30 | 40 | 5 | 4 |
| 38 | | Core -PL | 8P5CAP9 | Lab IX Distributed Technologies Lab | 40 | 60 | 100 | 16 | 24 | 40 | 3 | 2 |
| 39 | | Core-PL | 8P5CAP10 | Lab X Mini project using Latest Technologies | 40 | 60 | 100 | 16 | 24 | 40 | 3 | 2 |
| 40 | | Skill-V | 8P5CAS5 | Business Understanding and Interpersonal skills | 40 | 60 | 100 | 16 | 24 | 40 | 3 | 2 |
| 41 | VI | Core | 8P6CAPR | Project | 80 | 120 | 200 | 32 | 48 | 100 | 6 Months | 10 |
| Total Marks-4200 | | | | | Total Credits - 140 | | | | | | | |

MCA (Master of Computer Applications) 2017-2018

| S. No | Semester | Category | Paper Code | Title of the Course | Maximum Marks | | | Minimum Marks for Pass | | | Hours Week | Credits |
|-------|------------|--------------------|------------|--|---------------|-----|-------|------------------------|-----|-------|------------|---------|
| | | | | | CIA | E.E | Total | CIA | E.E | Total | | |
| 1 | I | Core | 17P1CA1 | C and C++ Programming | 25 | 75 | 100 | 10 | 30 | 50 | 5 | 4 |
| 2 | | Core | 17P1CA2 | Data Structures and Algorithms | 25 | 75 | 100 | 10 | 30 | 50 | 5 | 4 |
| 3 | | Core | 17P1CA3 | Digital Computer Fundamentals | 25 | 75 | 100 | 10 | 30 | 50 | 5 | 4 |
| 4 | | Core | 17P1CA4 | Database Management System | 25 | 75 | 100 | 10 | 30 | 50 | 5 | 4 |
| 5 | | Core | 17P1CA5 | Computer Graphics | 25 | 75 | 100 | 10 | 30 | 50 | 4 | 3 |
| 6 | | Core-PL | 17P1CAP1 | C and C++ Lab | 40 | 60 | 100 | 16 | 24 | 50 | 3 | 2 |
| 7 | | Core-PL | 17P1CAP2 | RDBMS Lab | 40 | 60 | 100 | 16 | 24 | 50 | 3 | 2 |
| 8 | | Skill Elective-I | 17P1CAS1 | Grooming & Business Etiquette | 40 | 60 | 100 | 16 | 24 | 50 | 3 | 2 |
| 9 | II | Core | 17P2CA6 | Computer Networks | 25 | 75 | 100 | 10 | 30 | 50 | 5 | 4 |
| 10 | | Core | 17P2CA7 | Operating System Design Principles | 25 | 75 | 100 | 10 | 30 | 50 | 5 | 3 |
| 11 | | Core | 17P2CA8 | Computer Architecture | 25 | 75 | 100 | 10 | 30 | 50 | 5 | 4 |
| 12 | | Core | 17P2CA9 | Java Programming | 25 | 75 | 100 | 10 | 30 | 50 | 4 | 4 |
| 13 | | Core | 17P2CA10 | Microprocessors and their Applications | 25 | 75 | 100 | 10 | 30 | 50 | 5 | 4 |
| 14 | | Core-PL | 17P2CAP3 | Java Programming Lab | 40 | 60 | 100 | 16 | 24 | 50 | 3 | 2 |
| 15 | | Core-PL | 17P2CAP4 | Multimedia and Operating Systems Lab | 40 | 60 | 100 | 16 | 24 | 50 | 3 | 2 |
| 16 | | Skill Elective-II | 17P2CAS2 | Presentation Skills | 40 | 60 | 100 | 16 | 24 | 50 | 3 | 2 |
| 17 | III | Core | 17P3CA11 | Internet and Web Technology | 25 | 75 | 100 | 10 | 30 | 50 | 5 | 4 |
| 18 | | Core | 17P3CA12 | Accounting and Financial Management | 25 | 75 | 100 | 10 | 30 | 50 | 5 | 4 |
| 19 | | Core | 17P3CA13 | Mathematical foundations of Computer Science | 25 | 75 | 100 | 10 | 30 | 50 | 5 | 4 |
| 20 | | Core | 17P3CA14 | Organizational Behaviour | 25 | 75 | 100 | 10 | 30 | 50 | 4 | 4 |
| 21 | | Core | 17P3CA15 | Software Engineering | 25 | 75 | 100 | 10 | 30 | 50 | 5 | 4 |
| 22 | | Core-PL | 17P3CAP5 | Object Oriented Analysis and Design Lab | 40 | 60 | 100 | 16 | 24 | 50 | 3 | 3 |
| 23 | | Core-PL | 17P3CAP6 | Web Design-Python Lab | 40 | 60 | 100 | 16 | 24 | 50 | 3 | 3 |
| 24 | | Skill Elective-III | 17P3CAS3 | Group Communication | 40 | 60 | 100 | 16 | 24 | 50 | 3 | 2 |

| S. No | Semester | Category | Paper Code | Title of the Paper | Maximum Marks | | | Minimum Marks for Pass | | | Hours Week | Credits |
|--------------------|----------|--------------------|--|--|---------------|-----|-------|------------------------|-----|-------|---------------|---------|
| | | | | | CIA | E.E | Total | CIA | E.E | Total | | |
| 25 | IV | Core | 17P4CA16 | Optimization Techniques | 25 | 75 | 100 | 10 | 30 | 50 | 5 | 5 |
| 26 | | Core | 17P4CA17 | Compiler Design | 25 | 75 | 100 | 10 | 30 | 50 | 5 | 5 |
| 27 | | Core | 17P4CA18 | Big Data Analytics | 25 | 75 | 100 | 10 | 30 | 50 | 5 | 4 |
| 28 | | Major Elective-1 | 17P4CAEL1A 17P4CAEL1B 17P4CAEL1C | Distributed Programming using J2EE Ubiquitous Computing Peer-to-Peer Computing | 25 | 75 | 100 | 10 | 30 | 50 | 5 | 4 |
| 29 | | Major Elective-II | 17P4CAEL2A 17P4CAEL2B 17P4CAEL2C | Enterprise Resource Planning Management Information System Software Project Management | 25 | 75 | 100 | 10 | 30 | 50 | 4 | 4 |
| 30 | | Core-PL | 17P4CAP7 | Data Analytics Lab | 40 | 60 | 100 | 16 | 24 | 50 | 3 | 2 |
| 31 | | Core -PL | 17P4CAP8 | Distributed Programming using J2EE lab | 40 | 60 | 100 | 16 | 24 | 50 | 3 | 2 |
| 32 | | Skill Elective-IV | 17P4CAS4 | Interpersonal Skills | 40 | 60 | 100 | 16 | 24 | 50 | 3 | 2 |
| 33 | V | Core | 17P5CA19 | Cross Platform - Mobile Applications Development | 25 | 75 | 100 | 10 | 30 | 50 | 6 | 4 |
| 34 | | Core | 17P5CA20 | Dot Net frame work with C# Programming | 25 | 75 | 100 | 10 | 30 | 50 | 6 | 4 |
| 35 | | Major Elective-III | 17P5CAEL3A 17P5CAEL3B 17P5CAEL3C | Soft Computing Internet of Things Human Computer Interaction | 25 | 75 | 100 | 10 | 30 | 50 | 6 | 4 |
| 36 | | Major Elective-IV | 17P5CAEL4A 17P5CAEL4B 17P5CAEL4C | Service Oriented Architecture Semantic Web Cloud Computing | 25 | 75 | 100 | 10 | 30 | 50 | 5 | 4 |
| 37 | | Core -PL | 17P5CAP9 | Cross Platform – Mobile Applications Development Lab | 40 | 60 | 100 | 16 | 24 | 50 | 3 | 3 |
| 38 | | Core-PL | 17P5CAP10 | C# Programming Lab | 40 | 60 | 100 | 16 | 24 | 50 | 3 | 3 |
| 39 | | Skill Elective-V | 17P5CAS5 | Business Models - IT Industries | 40 | 60 | 100 | 16 | 24 | 50 | 3 | 2 |
| 40 | VI | Core | 17P6CAPR | Project | 40 | 60 | 100 | 16 | 24 | 50 | 6 Months | 10 |
| Total Marks - 4000 | | | | | | | | | | | Credits – 140 | |

MASTER OF COMPUTER APPLICATIONS (MCA) 2017 – 2018

| COURSES | TOTAL NO OF COURSES | TOTAL MARKS | TOTAL CREDITS |
|----------------|----------------------------|--------------------|----------------------|
| Core | 31 | 3100 | 114 |
| Major Elective | 4 | 400 | 16 |
| Skill Elective | 5 | 500 | 10 |
| Total | 40 | 4000 | 140 |