## COURSE STRUCTURE

The course structure of M.C.A. Shall be as follows.
Semester – I
Code
Course Title
Internal Assessment
Semester Exam
Total
CS-101
Introduction to
Computing and its Applications
40

CS-102
Mathematical
Foundations
40
60
100
CS-103
Introduction to Programming
Paradigms
40
60
100

CS-104

Techniques		
40		
60		
100		
CS-105		
Business Data Processing and File System		
40		
60		
100		
CS-106		
Lab-I (Programming in C+Linux OS)		
50		

Statistical

100
150
CS-107
Lab-II (STAT+BDPFS)
50
100
150
Semester – II
CS-201
Computer Architecture
40
60

CS-202
Data Structure and Program Design
40
60
100
CS-203
Object Oriented Programming
40
60
100
CS-204
Data Base Management System

40
60
100
CS-205
Object Oriented Analysis and Design
40
60
100
CS-206
Lab-III (OOp + Core Java)
50

CS-207
Lab-IV (OOAD + DBMS)
50
100
150
Semester – III
CS-301
Operating System
40
60
100
CS-302

Data Communications and Computer Networks
40
60
100
CS-303
Analysis and Design of Algorithms
40
60
100
CS-304
Software Engineering

60
100
CS-305
Computer Graphics and Animation
40
60
100
CS-306
Lab-V (OS+CN+CG)
50
100
150
CS-307

Lab-VI (ADA+SE)
50
100
150
Semester – IV
CS-401
Compiler Design
40
60
100
CS-402
Internal Applications and Web Programming

40
60
100
CS-403
Information Security
40
60
100
CS-404
Software Testing and Quality Assurance
40
60
100

CS-405
Multimedia Applications
40
60
100
CS-406
Lab-VII (Javascript+Net)
50
100
150
CS-407
Lab-VIII (STQA+MA+CD)

100	
150	
Semester – V	
CS-501	
System Programming	
40	
60	
100	
CS-502	
Artificial Intelligence	
40	
60	

100 CS-503 Elective I 40 60 100 CS-504 Elective II 40 60

100

CS-505

40			
60			
100			
CS-506			
Lab-I (AI+SP)			
50			
100			
150			
CS-507			
Lab II (Electives)			
50			
100			

Elective III

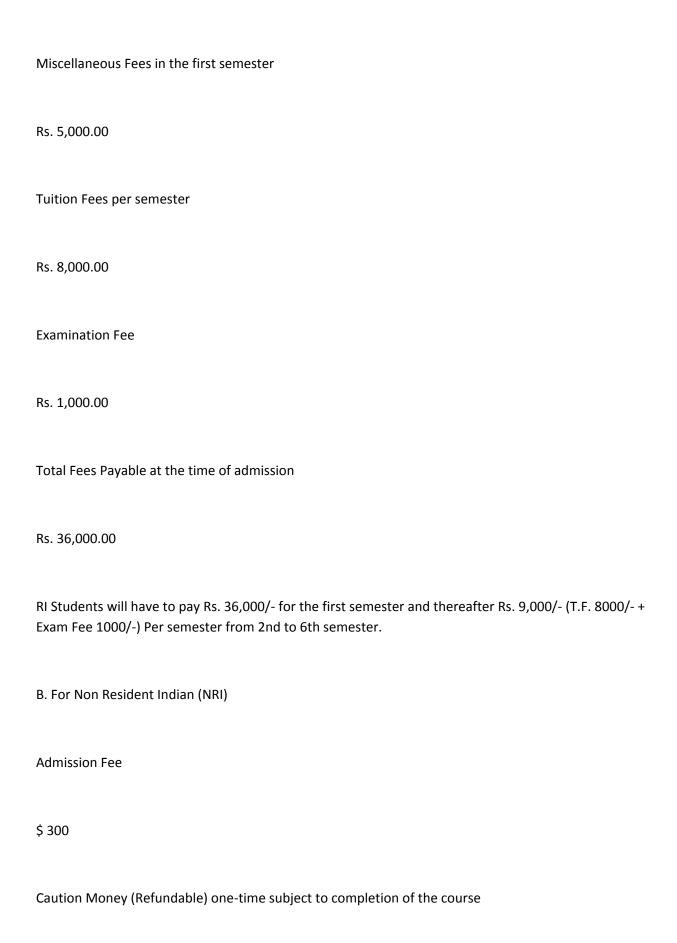
150
Semester – VI
CS-601
100*
400**
500
*Mid term assessment of project progress  **Project Report Evaluation: 200 + Comprehensive Viva Voce: 200  Grand Total – 4500
Elective Courses
Group I
1. Data Mining and warehousing
2. Advance DBMS

3. Multimedia Databases
Group II
1. Network Management
2. Network Programming
3. Advance Internet Tech.
Group III
1. Soft Computing
2. Robotics
3. Knowledge Management
Group IV
1. Principles of Wireless LAN

2. Advanced Java

Every student shall have to select one elective group of three papers from the four elective groups.
Note : Course Structure may be modified time to time
ATTENDANCE
A candidate appearing at any semester examination will be required to attend at least 75% of the lectures delivered and of the practical classes held separately in each paper.
FEE STRUCTURE
The fee structure of the course will be as follows.
A. For Indian Students (RI)
Admission Fee
Aumssion ree
Rs. 9,000.00
Caution Money (Refundable) one-time subject to completion of the course
Rs. 5,000.00
Davelonment Foos in the first comester
Development Fees in the first semester
Rs. 8,000,00

3. E commerce



\$ 300
Development Fees in the first semester
\$ 300
Semester Fee (Misc.) per semester
\$ 225
Tuition Fees per semester
\$ 300
Examination Fee per semester
\$ 75
Total Fees Payable at the time of admission
\$ 1500
NRI students will have to pay \$ 1500 for the first semester and thereafter \$ 600 per semester.

## **ENTRANCE TEST**

- 1. Entrance test for admission to the M.C.A. course will be a written test of 100 marks. The written test will be of one and a half hour duration. There will be 85 objective type questions, each carrying one mark and five subjective type questions, each carrying three marks. There will be questions on logical and mathematical ability, general awareness, fundamentals of computer and English.
- 2. The question paper will be provided in English only.
- 3. The list of the selected candidates and any other further direction will be displayed on the Notice Board of the Department of Statistics, Patna University.
- 4. The admit card for the entrance examination will be given to the candidates at the time of submission of the application forms. Admit cards will not be sent separately.

## **HOW TO APPLY**

The applicants will be required to apply in the prescribed application form to the Head Course coordinator, Department of Statistics, Patna University, Patna. The application form and the prospectus can be obtained from the Department of Statistics, P.U. on submission of a Bank Draft for Rs. 1,000/-payable to Head/Director MCA Course Dept. of Statistics, Patna University, payable at Patna. No additional fee for the entrance examination will be charged.