

## **MASTER'S DEGREE COURSE IN COMPUTER APPLICATION (MCA): Structure and Brief Syllabi of MCA**

Master's degree Course in Computer Application (MCA) is a three year programme. For admission to MCA course, a candidate must have passed either a Bachelor of Computer Application (BCA) course or should be holding a Bachelor's degree in Computer Science or a Bachelor's degree in Mathematics along with a certificate or Diploma in Computing.

In order to pass MCA examination, it will be necessary to pass each Part of the examination separately. To pass each Part of the examination it is, now, compulsory for every student, admitted in 2008 session or thereafter, to secure at least 33% of marks in each paper. To determine 33% of marks in each paper, the marks obtained by the candidate, both in the term end theoretical written examination and practical examination/home assignment, as the case may be, will be clubbed and counted together and percentage determined accordingly. However, if a candidate has secured zero mark in term end theoretical written examination or practical examination/home assignment, in any paper, he/she will be deemed to have failed in that paper. Failure in one paper will mean failure in that Part of the examination. Hence, students must strive hard to pass individually in all the papers.

The MCA programme consists of 30 papers in all; divided equally into three parts. Thus, each Part of the examination, to be taken at the end of each academic session, will consist of 10 papers. The distribution of marks between written examination, assignment and practical work will be as follows:

Paper	Title of the paper	Distribution of Marks Between Theory and Practical /Assignment			Minimum Marks required to pass the examination (written exam. + practical/ Assignment taken together)
		Written exam	Assignment	Practical	
<b>PART-I</b>					
1	Problem Solving and Programming–	80	20	-	33
2	Computer Organization and Assembly Language Programming	80	20	-	33
3	Discrete Mathematics	80	20	-	33
4	Systems Analysis and Design	80	20	-	33
5	Communication Skills	80	20	-	33
6	C and Assembly Language Programming (Lab-based training)	20	-	80	33
7	Design and Analysis of Algorithms	80	20	-	33
8	Advanced Discrete Mathematics	80	20	-	33
9	Data Communication and Computer Networks	80	20	-	33
10	Principles of Management and Information systems	80	20	-	33
	<b>Total</b>	<b>740</b>	<b>180</b>	<b>80</b>	<b>330</b>
<b>PART-II</b>					
11	Internet Concepts and Web Design (Lab-based training)	20	-	80	33
12	Object Oriented Analysis and Design	80	20	-	33

13	Software Engineering	80	20	-	33
14	Accountancy and Financial Management	80	20	-	33
15	Lab (based on papers 12,13,and 14 of Part-II course)	20	-	80	33
16	Data and File Structures	80	20	-	33
17	Operating System Concepts and Networking Management	80	20	-	33
18	Introduction to Database Management System	80	20	-	33
19	Object Oriented Technologies and Java Programming	80	20	-	33
20	Lab (based on papers 16,17 and 19 of Part-II course)	20	-	80	33
	<b>Total</b>	<b>620</b>	<b>140</b>	<b>240</b>	<b>330</b>
21	Operating System (MCS-41)	80	20	—	33
22.	Advanced Database Management System	80	20	—	33
23.	Lab work (UNIX & Oracle) (MCSL-45	20	—	80	33
24.	Advanced Internet Technologies	80	20	—	33
25.	Computer Graphics and Multimedia	80	20	—	33
26.	Lab work (based on papers 24 and 25 of Part-III course.)	20	—	80	33
27.	Artificial Intelligence and Knowledge Management	80	20	—	33
28.	Numerical and Statistical Computing	80	20	—	33
29.	Application Development with net Framework	80	20	—	33
30	Project* (MCSP-060)	80 (Report)	20 (Viva)	—	33
	<b>Total</b>	<b>680</b>	<b>160</b>	<b>160</b>	<b>330</b>