

MASTER OF COMPUTER APPLICATIONS - MCA
Course Structure and Scheme of Examination w.e.f 2016-17

FIRST YEAR – FIRST SEMESTER

Sub Code	<u>Name of the Subject</u>	Int. Marks	Ext. Marks	Total Marks	No of Credits	Hours/ Week
MCA101	Fundamentals of Computers	30	70	100	4	4
MCA102	Programming with C	30	70	100	5	4
MCA103	Computer Organization	30	70	100	5	4
MCA104	Discrete Mathematical Structures	30	70	100	5	4
MCA105	Accountancy and Financial Management	30	70	100	4	4
MCA106	PC Software Lab	30	70	100	3	6
MCA107	C Programming Lab	30	70	100	3	6
MCA108	Seminar	50	--	50	1	3
TOTAL		260	490	750	30	35

FIRST YEAR – SECOND SEMESTER

Sub Code	<u>Name of the Subject</u>	Int. Marks	Ext. Marks	Total Marks	No of Credits	Hours/ Week
MCA201	Language Processors	30	70	100	4	4
MCA202	Data Base Management Systems	30	70	100	5	4
MCA203	Data Structures using C++	30	70	100	5	4
MCA204	Operating System Principles	30	70	100	5	4
MCA205	Probability & Statistics	30	70	100	4	4
MCA206	Data Structures using C++ LAB	30	70	100	3	6
MCA207	DBMS LAB	30	70	100	3	6
MCA208	Communication Skills	50	--	50	1	3
TOTAL		260	490	750	30	35

SECOND YEAR - THIRD SEMESTER

Sub Code	Name of the Subject	Int. Marks	Ext. Marks	Total Marks	No of Credits	Hours/ Week
MCA301	Object Oriented Programming through JAVA	30	70	100	5	4
MCA302	Computer Networks	30	70	100	5	4
MCA303	Operations Research	30	70	100	4	4
MCA304	Computer Graphics	30	70	100	5	4
MCA305	Artificial Intelligence	30	70	100	4	4
MCA306	Java Programming Lab	30	70	100	3	6
MCA307	Unix Shell Programming LAB	30	70	100	3	6
MCA308	Seminar	50	--	50	1	3
TOTAL		260	490	750	30	35

SECOND YEAR - FOURTH SEMESTER

Sub Code	Name of the Subject	Int. Marks	Ext. Marks	Total Marks	No of Credits	Hours/ Week
MCA401	Principles of Programming Languages	30	70	100	4	4
MCA402	Object Oriented Modeling and Design Using UML	30	70	100	5	4
MCA403	Web Technologies	30	70	100	5	4
MCA404	Software Engineering	30	70	100	5	4
MCA405.1 405.2 405.3	Grid and Cluster Computing Cryptography and Networks Security Simulation Modeling and Analysis	30	70	100	4	4
MCA406	Web Technologies Lab	30	70	100	3	6
MCA407	Visual Programming Lab	30	70	100	3	6
MCA408	Soft skills	50	--	50	1	3
TOTAL		260	490	750	30	35
Non - Core		30	70	100	4	4

THIRD YEAR - FIFTH SEMESTER

Sub Code	<u>Name of the Subject</u>	Int. Marks	Ext. Marks	Total Marks	No of Credits	Hours/ Week
MCA501	Data Mining and Big Data	30	70	100	5	4
MCA502	.Net Programming	30	70	100	5	4
MCA503	Design and Analysis of Algorithms	30	70	100	5	4
MCA504.1 504.2 504.3	Embedded Systems Mobile Computing Cloud Computing	30	70	100	4	4
MCA505.1 505.2 505.3	Image Processing Microprocessors and Interfacing Web Engineering	30	70	100	4	4
MCA 506	.Net Programming Lab	30	70	100	3	6
MCA 507	Data Mining And Hadoop Lab	30	70	100	3	6
MCA 508	Seminar	50	--	50	1	3
TOTAL		260	490	750	30	35
Non - Core		30	70	100	4	4

THIRD YEAR - SIXTH SEMESTER

Sub Code	<u>Name of the Subject</u>	Int. Marks	Ext. Marks	Total Marks	No of Credits	Hours/ Week
MCA601	Project Work	--	150	150	10	Five Months Duration

TOTAL MARKS FOR THE MCA COURSE : 3900

TOTAL CREDITS FOR THE MCA COURSE : 160