

# MASTER COMPUTER APPLICATION (MCA)– 2 YEARS

FIRST YEAR					
FIRST SEMESTER			SECOND SEMESTER		
S.No.	Paper No	Title of Paper(s)	S.No.	Paper No	Title of Paper(s)
1	20MCA21C1	Object Oriented Programming Using JAVA	1	20MCA22C1	Advance Object Technology
2	20MCA21C2	Compiler Design	2	20MCA22C2	Advance Database Systems & Data Warehouse
3	20MCA21C3	Computer Graphics & Multimedia	3	20MCA22C3	Operating Systems & Shell Programming
4	20MCA21C4	Digital Design & Computer Architecture	4	Elective-I	
5	20MCA21C5	Advance Data Structures Using C++/Java		20MCA22DA1	I) Theory of Computation
6	20MCA21CL1	Software Lab -1 Based on 20MCA21C1, 20MCA21C2 & 20MCA21C3		20MCA22DA2	ii) Computer Networks & Distributed Systems
7	20MCA21CL2	Software Lab -2 Based on 20MCA21C4 & 20MCA21C5		20MCA22DA3	iii) Web Technologies
			5	Elective-II	
				20MCA22DB1	I) Cloud Computing
				20MCA22DB2	ii) Software Engineering
				20MCA22DB3	iii) Advance Computer Architecture & Quantum Computing
			6	20MCA22CL1	Software Lab-3 Based on 20MCA22C1 & Elective I and/or II
			7	20MCA22CL2	Software Lab-4 Based on 20MCA22C2 & 20MCA22C3
			8	20MCA22C4	Industry Internship Report/ Project Report/Dissertation –I

SECOND YEAR					
THIRD SEMESTER			FOURTH SEMESTER		
S.No.	Paper No	Title of Paper(s)	S.No.	Paper No	Title of Paper(s)
1	21MCA23C1	Data Mining & Big Data Analytics	1	21MCA24C1	Advance Software Engineering
2	21MCA23C2	Artificial Intelligence & Computational Intelligence	2	21MCA24C2	IoT & Sensor Networks
3	21MCA23C3	Android Mobile Application Development	3	21MCA24C3	Web Development Using .NET Framework
4	Elective-I		4	Elective-I	
	21MCA23DA1	I) Computer Vision		21MCA24DA1	I) Cyber Security & Blockchain Technology
	21MCA23DA2	ii) Software Testing & Quality Assurance		21MCA24DA2	ii) Edge and Fog Computing
	21MCA23DA3	iii) Mixed Reality & Wearable Computing		21MCA24DA3	iii) High Speed Networks
5	Elective-II		5	Elective-II	
	21MCA23DB1	I) Network Programming		21MCA23DB1	I) Machine Learning & Python Programming
	21MCA23DB2	ii) Natural Language Processing & Speech Recognition		21MCA23DB2	ii) Web Development Using PHP
	21MCA23DB3	iii) Bioinformatics Computing		21MCA23DB3	iii) Neural Networks & Deep Learning
6	21MCA23CL1	Software Lab-5 Based on 21MCA23C1 & 21MCA23C3	6	21MCA24CL1	Software Lab-7 Based on 21MCA24C1, 21MCA24C2 & Elective II
7	21MCA23CL1	Software Lab-6 Based on 21MCA23C2, Elective I & II	7	21MCA24CL2	Software Lab-8 Based on 21MCA24C3 & Elective I
			8	21MCA24C4	Industry Internship Report/ Project Report/ Dissertation –II