

**SCHEME OF INSTRUCTION
MASTER OF COMPUTER APPLICATIONS (MCA)**

SEMESTER – I

S. No.	Paper Code	Title of the paper	I.A Marks	U.E Marks	Total Marks	Duration of U. Exam	No. of Credits
1	PCC101	Mathematical Foundations of Computer Science	30	70	100	3	4
2	PCC102	Data Structures using C	30	70	100	3	4
3	PCC103	Object Oriented Programming using Java	30	70	100	3	3
4	PCC104	Computer Architecture	30	70	100	3	3
5	PCC105	Probability & Statistics	30	70	100	3	3
6	MGC106	Managerial Economics and Accountancy	30	70	100	3	3
PRACTICALS							
7	LCC151	Data Structures using C Lab	25	50	75	3	2
8	LCC152	Java Programming Lab	25	50	75	3	2
9	HSC153	Soft Skills Lab	25	50	75	3	2
			255	570	825	-	26

Abbreviation	Full Form
PCC	Professional Core Course
MGC	Management Course
LCC	Laboratory Core Course
HSC	Humanities and Social Science

SEMESTER – II

S. No.	Paper Code	Title of the paper	I.A Marks	U.E Marks	Total Marks	Duration of U. Exam	No. of Credits
1	PCC 201	Operating Systems	30	70	100	3	3
2	PCC 202	Database Management System	30	70	100	3	4
3	PCC 203	Design and Analysis of Algorithms	30	70	100	3	3
4	PCC 204	Artificial Intelligence	30	70	100	3	4
5	PCC 205	Machine Learning	30	70	100	3	3
6	MGC 206	Operations Research	30	70	100	3	3
PRACTICALS							
7	LCC 251	Operating Systems Lab	25	50	75	3	2
8	LCC 252	AI with Python Lab	25	50	75	3	2
9	LCC 253	Database Management Systems Lab	25	50	75	3	2
		Total	255	570	825	-	26

Abbreviation	Full Form
PCC	Professional Core Course
LCC	Laboratory Core Course
MGC	Management Course

SEMESTER – III

S. No.	Paper Code	Title of the paper	I.A Marks	U.E Marks	Total Marks	Duration of U. Exam	No. of Credits
1	PCC301	Software Engineering	30	70	100	3	4
2	PCC302	Computer Networks	30	70	100	3	4
3	PCC303	Data Science	30	70	100	3	3
4	PCC304	Web Technologies	30	70	100	3	3
5	PEC**	Professional Elective-I	30	70	100	3	3
6	PEC**	Professional Elective-II	30	70	100	3	3
PRACTICALS							
7	LCC351	Computer Networks Lab	25	50	75	3	2
8	LCC352	Software Engineering Lab	25	50	75	3	2
9	LCC353	Data Science Lab	25	50	75	3	2
10	MPW354	Mini project	50	-	50	-	2

PROFESSIONAL ELECTIVES

Course Code PEC**	Professional Elective -I	Course Code PEC**	Professional Elective -II
PEC 311	Information Security	PEC 321	Network Security
PEC 312	Internet of Things	PEC 322	Natural Language Processing

SEMESTER – IV

S. No.	Paper Code	Title of the paper	I.A Marks	U.E Marks	Total Marks	Duration of U. Exam	No. of Credits
1	PEC**	Professional Elective -III	30	70	100	3	3
2	PEC**	Professional Elective -IV	30	70	100	3	3
3	OE**	Open Elective	30	70	100	3	2
PRACTICALS							
4	PW 401	Project Work	50	100	150	3	12
		Total	140	310	450	-	20

PROFESSIONAL ELECTIVES

Course Code PEC**	Professional Elective -I	Course Code PEC**	Professional Elective -II
PEC411	Block Chain Technologies	PEC421	Digital Forensics
PEC 412	Deep Learning	PEC422	Optimization Techniques

Open Electives

Grade for Project Report

Course Code OE**	Open Elective	A+	80% & above
OE 451	Constitution of India	A	70% & above, less than 80%
		B	60% & above, less than 70%
		C	55% & above, less than 60%
OE 452	Organization Behaviour	D	50% & above, less than 55%
OE 453	Intellectual Property & Cyber Law	E	40% & above, less than 50%
		F	Less than 40%

NOTE: Two Assignments for each theory paper are to be submitted along with examination fee payment receipt.