

KURUKSHETRA UNIVERSITY, KURUKSHETRA
SCHEME OF EXAMINATIONS
FOR
MASTER OF COMPUTER APPLICATIONS
(NON-CBCS)
(FOR INSTITUTES AFFILIATED TO KURUKSHETRA UNIVERSITY, KURUKSHETRA)

W. E. F. ACADEMIC SESSION 2020-21 IN PHASED MANNER

Paper Code	Nomenclature of Paper	Workload Per Week (Hrs.)	Exam Time (Hrs.)	External Marks		Internal Marks	Total Marks	Pass Marks
				Max.	Pass			
First Semester								
MCA-20-11	Programming in Java	4	3	75	30	25	100	40
MCA-20-12	Data Structures using C++	4	3	75	30	25	100	40
MCA-20-13	Operating Systems	4	3	75	30	25	100	40
MCA-20-14	Data Communication and Computer Networks	4	3	75	30	25	100	40
MCA-20-15	Object-Oriented Analysis and Design using UML	4	3	75	30	25	100	40
MCA-20-16	S/W Lab – I Based on MCA-20-11	5	3	100	40	-	100	40
MCA-20-17	S/W Lab – II Based on MCA-20-12	5	3	100	40	-	100	40
Total		30		575	230	125	700	280
Second Semester								
MCA-20-21	Web Technologies	4	3	75	30	25	100	40
MCA-20-22	Linux and Shell Programming	4	3	75	30	25	100	40
MCA-20-23	Advanced Data Base Systems	4	3	75	30	25	100	40
MCA-20-24	Elective-I	4	3	75	30	25	100	40
MCA-20-25	Elective-II	4	3	75	30	25	100	40
MCA-20-26	S/W Lab – III Based on MCA-20-21 and MCA-20-23	5	3	100	40	-	100	40
MCA-20-27	S/W Lab – IV Based on MCA-20-22	5	3	100	40	-	100	40
Total		30		575	230	125	700	280
Elective – I								
MCA-20-24 (i)	Principles of Programming Languages	4	3	75	30	25	100	40
MCA-20-24(ii)	High Performance Networks	4	3	75	30	25	100	40
MCA-20-24(iii)	Compiler Design	4	3	75	30	25	100	40
Elective – II								
MCA-20-25 (i)	Theory of Computation	4	3	75	30	25	100	40
MCA-20-25 (ii)	Design and Analysis of Algorithms	4	3	75	30	25	100	40

Paper Code	Nomenclature of Paper	Workload Per Week (Hrs.)	Exam Time (Hrs.)	External Marks		Internal Marks	Total Marks	Pass Marks
				Max.	Pass			
MCA-20-25(iii)	Security in Computing	4	3	75	30	25	100	40
Third Semester								
MCA-20-31	Computer Architecture and Parallel Processing	4	3	75	30	25	100	40
MCA-20-32	Data Mining and Integration using R	4	3	75	30	25	100	40
MCA-20-33	Artificial Intelligence	4	3	75	30	25	100	40
MCA-20-34	Elective-III	4	3	75	30	25	100	40
MCA-20-35	Elective-IV	4	3	75	30	25	100	40
MCA-20-36	S/W Lab – V Based on MCA-20-32	5	3	100	40	-	100	40
MCA-20-37	S/W Lab – VI Based on MCA-20-35	5	3	100	40	-	100	40
*MCA-20-38	Summer Training / Internship (Industry Based)	-	Viva Voce	150	60	50	200	80
Total		30		725	290	175	900	360
Elective – III								
MCA-20-34 (i)	Cloud Computing and IoT	4	3	75	30	25	100	40
MCA-20-34 (ii)	Cyber Security	4	3	75	30	25	100	40
MCA-20-34(iii)	Digital Marketing	4	3	75	30	25	100	40
Elective – IV								
MCA-20-35 (i)	Advances in Java	4	3	75	30	25	100	40
MCA-20-35 (ii)	Advanced Web Technologies	4	3	75	30	25	100	40
MCA-20-35(iii)	Programming with Kotlin	4	3	75	30	25	100	40
Fourth Semester								
MCA-20-41	Big Data and Pattern Recognition	4	3	75	30	25	100	40
MCA-20-42	Computer Graphics and Animation	4	3	75	30	25	100	40
MCA-20-43	Mobile Application Development	4	3	75	30	25	100	40
MCA-20-44	Elective-V	4	3	75	30	25	100	40
MCA-20-45	Elective-VI	4	3	75	30	25	100	40
MCA-20-46	S/W Lab-VII Based on MCA-20-41 and MCA-20-42	5	3	100	40	-	100	40
MCA-20-47	Project Based on MCA-20-43	5	3	75	30	25	100	40
Total		30		550	220	150	700	280
Grand Total		120		2425	970	575	3000	1200
Elective – V								
MCA-20-44 (i)	Soft Computing	4	3	75	30	25	100	40
MCA-20-44 (ii)	Machine Learning	4	3	75	30	25	100	40

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				Max.	Pass			
MCA-20-44(iii)	Digital Image Processing	4	3	75	30	25	100	40
Elective – VI								
MCA-20-45 (i)	Optimization Techniques	4	3	75	30	25	100	40
MCA-20-45(ii)	Information Systems	4	3	75	30	25	100	40
MCA-20-45(iii)	Blockchain Technology	4	3	75	30	25	100	40