SCHEME OF EXAMINATION

(w. e. f. Academic Year 2020-2021 onwards)

For

MASTER OF COMPUTER APPLICATIONS (MCA) DEGREE

(02 Years)

Offered at affiliated Institutes of GGSIPU from A.S. 2020-21 onwards

GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY
SECTOR 16C, DWARKA, NEW DELHI

FIRST SEMESTER EXAMINATION

Paper ID	Paper Code	Paper	L	T/P	Credit
	MCA-101	Discrete Structures	3	1	4
	MCA-103	Computer Networks	3	1	4
	MCA-105	Operating Systems with Linux	3	1	4
	MCA-107	Database Management Systems	3	1	4
	MCA-109	Object Oriented Programming and JAVA	3	1	4
Practical & Project					
	MCA-161	Computer Networks Lab.	0	2	1
	MCA-163	Operating Systems with Linux Lab.	0	2	1
	MCA-165	Database Management Systems Lab.	0	2	1
	MCA-167	Object Oriented Programming and JAVA Lab.	0	2	1
	MCA-169	Minor Project – I	0	6	3
NUES*					
	MCA-171	Professional Proficiency – I (It is suggested to have Personality Development and Communication Skills Course)	0	2	1
		Total	**15**	**21**	**28**

* Non-University Examination System (NUES)

SECOND SEMESTER EXAMINATION

Paper ID	Paper Code	Paper	L	T/P	Credit
	MCA-102	Data and File Structures	3	1	4
	MCA-104	Object Oriented Software Engineering	3	1	4
	MCA-106	Python Programming	3	1	4
Core Elective - I *(Choose any One)*					
	MCA-108	Advanced Database Management Systems	3	1	4
	MCA-110	Data Warehousing and Data Mining			
	MCA-112	Mobile Applications Design and Development			
	MCA-114	Full Stack Development			
	MCA-116	Web Technologies			
	MCA-118	Theory of Computations			
	MCA-120	Software Testing			
	MCA-122	Microprocessors			
	MCA-124	Embedded System			
	MCA-126	Information Security			
Open Elective - I *(Choose any One)*					
	MCA-128	Digital Marketing	3	1	4
	MCA-130	Management Information System			
	MCA-132	Management Principles and Organizational Behavior			
	MCA-134	Finance and Accounting			
Practical & Project					
	MCA-162	Data and File Structures Lab.	0	2	1
	MCA-164	Object Oriented Software Engineering Lab.	0	2	1
	MCA-166	Python Programming Lab.	0	2	1
	MCA-168	Lab. based on Core Elective - I	0	2	1
	MCA-170	Minor Project – II	0	6	3
NUES*					
	MCA-172	Environment Science (NUES)	3	0	3
	MCA-174	Professional Proficiency – II (It is suggested to have Technical Paper Writing Course)	0	2	1
Total			18	21	31

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THIRD SEMESTER EXAMINATION

Paper ID	Paper Code	Paper	L	T/P	Credit
	MCA-201	Design and Analysis of Algorithms	3	1	4
	MCA-203	Artificial Intelligence and Machine Learning	3	1	4
Core Elective - II *(Choose any One)*					
	MCA-205	Statistics and Data Analytics	3	1	4
	MCA-207	Enterprise Computing with JAVA			
	MCA-209	Natural Language Processing			
	MCA-211	Computer Graphics			
	MCA-213	Wireless Sensor Networks			
	MCA-215	Software Project Management			
	MCA-217	Advanced Computer Architecture			
	MCA-219	Distributed Systems			
	MCA-221	Applied Cryptography			
	MCA-223	Cloud Computing			
	MCA-225	e-Business Systems			
Core Elective - III *(Choose any One)*					
	MCA-227	Web Intelligence and Big Data	3	1	4
	MCA-229	Flutter and Dart			
	MCA-231	Service Oriented Architecture			
	MCA-233	Multimedia Technologies			
	MCA-235	Internet of Things			
	MCA-237	Soft Computing			
	MCA-239	Software Quality Management			
	MCA-241	Digital Image Processing			
	MCA-243	Compiler Design			
	MCA-245	Parallel Computing			
	MCA-247	Numerical and Scientific Computing			
Open Elective - II *(Choose any One)*					
	MCA-249	Research Methodology	3	1	4
	MCA-251	Operational Research			
	MCA-253	Cyber Security and Cyber Laws			
	MCA-255	e-Content Development			
Practical & Project					
	MCA-261	Design and Analysis of Algorithms Lab.	0	2	1
	MCA-263	Artificial Intelligence and Machine Learning Lab.	0	2	1
	MCA-265	Lab. based on Core Elective - II	0	2	1
	MCA-267	Lab. based on Core Elective - III	0	2	1

	MCA-269	Minor Project – III	0	6	3
NUES*					
	MCA-271	Entrepreneurship Mindset (NUES)	3	0	3
	MCA-273	Professional Proficiency – III (It is suggested to have IPR, Human Values and Professional Ethics Course)	0	2	1
Total			**18**	**21**	**31**

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FOURTH SEMESTER EXAMINATION

Paper ID	Paper Code	Paper	L	T/P	Credit
	MCA-202	Dissertation (Major Project)	-	-	20
NUES*					
	MCA-272	One MOOC Course (from SWAYAM Platform) (NUES)	-	-	2
	MCA-274	Professional Proficiency – IV (Seminar and Progress Report)	-	-	4
		Total	**-**	**-**	**26**