Solapur University, Solapur

M. C. A.

Syllabus (Semester – I and II)

(Choice Based Credit System)

With Effect from June 2018-19

Structure of the Syllabus:

M. C. A. Part – I Semester-I

Paper Code	Title of the Paper	hours/ week	Distribution of Marks for Examination			Credits
			Internal	University	Total	

	Hard Core – Theory					
HCT 1.1	Introduction to Computers	04	30	70	100	04
HCT 1.2	Programming using C	04	30	70	100	04
HCT 1.3	Digital Circuits and Microprocessors	04	30	70	100	04
HCT 1.4	Management	04	30	70	100	04
	Soft Core – Theory (Any One)					
SCT 1.1	Discrete Mathematical Structures	04	30	70	100	04
SCT 1.2	Operations Research	04				
	Hard Core – Practical					
HCP 1.1	Practical based on HCT 1.1	04	15	35	50	02
HCP 1.2	Practical based on HCT 1.2	04	15	35	50	02
HCP 1.3	Practical based on HCT 1.3	04	15	35	50	02
HCP 1.4	Project – I	02	15	35	50	02
Total		**-**	**210**	**490**	**700**	**28**

M. C. A. Part – I Semester-II

Paper Code	Title of the Paper	hours/ week	Distribution of Marks for Examination			Credits
			Internal	University	Total	
	Hard Core – Theory					
HCT 2.1	Object Oriented Programming using C++	04	30	70	100	04
HCT 2.2	Data Structures	04	30	70	100	04
HCT 2.3	Operating System	04	30	70	100	04
*HCT/P 2.3	Communicate in English Confidently*	04	20	55	75	03
	Soft Core – Theory (Any One)					
SCT 2.1	Software Engineering	04	30	70	100	04
SCT 2.2	Graph Theory	04				
	Open Elective (Any One)					
OET 2.1	Office Automation	04	30	70	100	04
OET 2.2	Linux Operating System	04				
	Hard Core – Practical					
HCP 2.1	Practical based on HCT 2.1	04	15	35	50	02
HCP 2.2	Practical based on HCT 2.2	04	15	35	50	02
HCP 2.3	Project –II	02	15	35	50	02
	Open Elective (Any One)					
OEP 2.1	Practical Based on OET 2.1	02	15	35	50	02
OEP 2.2	Practical Based on OET 2.2	02				
	Communication skills*	03+01	-	-	-	-
Total		**-**	**210**	**490**	**700**	**28**

* Scoring 50% marks is mandatory for successfully completing this semester course.

* Paper is offered only to students of Department of Computer Science, Solapur University, Solapur. Scoring 50% marks is mandatory for successfully completing this semester course.
*HCT/P is mandatory for every student who seeks M.Sc./M.A./M.C.A. degree and has to earn 3 credits each in Sem II & Sem-III. In order to Pass in the above course the students should secure at least 27 Marks for theory and 10 marks for Internal Assessment. However, these credits will not be accumulated for CGPA. In case student fails in these courses he will be declared as fail.

Solapur University, Solapur

M. C. A. (Science Faculty)

Syllabus (Semester – III and IV)

(Choice Based Credit System)

With Effect from June 2018-19

Structure of the Syllabus:

M. C. A. Part – II, Semester – III

Paper Code	Title of the Paper	Contact hrs/ week	Distribution of Marks for Examination			Credits
			Internal	University	Total	
Hard Core – Theory						
HCT 3.1	System Software	04	30	70	100	04
HCT 3.2	DBMS	04	30	70	100	04
HCT 3.3	Java Programming	04	30	70	100	04
*HCT/P 3.4	Technical English Communication Skills*	04	20	55	75	03
Soft Core – Theory (Any One)						
SCT 3.1	Computer Communication Network	04	30	70	100	04
SCT 3.2	Computer Architecture	04				
SCT 3.3	Programming with PHP	04				
Open Elective (Any One)						
OET 3.1	Fundamentals of Web Designing	04	30	70	100	04
OET 3.2	Internet of Things	04				
Hard Core – Practical						
HCP 3.1	Practical based on HCT 3.2	04	15	35	50	02
HCP 3.2	Practical based on HCT 3.3	04	15	35	50	02
HCP 3.3	Project –III	02	15	35	50	02
Open Elective (Any One)						
OEP 3.1	Practical based on OET 3.1	02	15	35	50	02
OEP 3.2	Practical based on OET 3.2	02				
	Technical Presentation Skills*	03+01	30	70	100	-
Total		-	**210**	**490**	**700**	**28**

M. C. A. Part – II, Semester – IV

Paper Code	Title of the Paper	Contact hrs/ week	Distribution of Marks for Examination			Credits
			Internal	University	Total	
Hard Core – Theory						
HCT 4.1	.NET	04	30	70	100	04
HCT 4.2	Data Mining and Warehouse	04	30	70	100	04
HCT 4.3	UML	04	30	70	100	04
HCT 4.4	Finite Automata	04	30	70	100	04
Soft Core – Theory (Any One)						
SCT 4.1	Distributed Operating System	04	30	70	100	04
SCT 4.2	Computer Graphics	04				
Hard Core – Practical						
HCP 4.1	Practical based on HCT 4.1	04	15	35	50	02
HCP 4.2	Practical based on HCT 4.2	04	15	35	50	02
HCP 4.3	Practical based on HCT 4.4	04	15	35	50	02
HCP 4.2	Project –IV	02	15	35	50	02
Total		-	**210**	**490**	**700**	**28**

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*HCT/P is mandatory for every student who seeks M.Sc./M.A./M.C.A. degree and has to earn 3 credits each in Sem II & Sem-III. In order to Pass in the above course the students should secure at least 27 Marks for theory and 10 marks for Internal Assessment. However, these credits will not be accumulated for CGPA. In case student fails in these courses he will be declared as fail.