

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING & EXAMINATION

Master of Computer Applications (MCA) Ist Semester

S.NO	Board of Study	Subject Code	Subject	Periods Per Week			Scheme of Exam			Total Marks	Credits L+(T+P)/2
				L	T	P	Theory / Practical				
							ESE	CT	TA		
1	Applied Maths	521151(14)	Mathematical Foundations of Computer Science	4	1	0	100	20	20	140	5
2	Computer Applications	521152(21)	Information and Web Technology	4	1	0	100	20	20	140	5
3	Computer Applications	521153(21)	Problem Solving And Program Design With C	4	1	0	100	20	20	140	5
4	Computer Applications	521154(21)	Computer Organization & Architecture	4	1	0	100	20	20	140	5
5	Humanities	521155(46)	Professional communication in English	4	1	0	100	20	20	140	5
6	Computer Applications	521161(21)	Programming Lab in C	0	0	4	75	_	25	100	2
7	Computer Applications	521162(21)	Software Technology Lab I	0	0	4	75	_	25	100	2
8	Humanities	521163(46)	Professional Communication in English	0	0	4	50	_	25	75	2
9	Humanities	521164(46)	Personality Development	0	0	2	_	_	25	25	1
10			Library	-	--	1	--	--	--	--	--
			TOTAL	20	5	15	700	100	200	1000	32

ESE: End Semester Examination CT: Class Test TA: Teacher's Assessment L: Lecture T: Tutorial P: Practical

Note: Duration of End Semester Examination of all theory papers will be of Three Hours

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING & EXAMINATION

Master of Computer Applications (MCA) IInd Semester

Sl. No.	Board of Study	Subject Code	SUBJECT	Periods Per Week			Scheme of Exam			Total Marks	Credits L+(T+P)/2
				L	T	P	Theory / Practical				
							ESE	CT	TA		
1	Computer Applications	521251(21)	Operating System	4	1	0	100	20	20	140	5
2	Computer Applications	521252(21)	Database Management System	4	1	0	100	20	20	140	5
3	Computer Applications	521253(21)	Data Structures	4	1	0	100	20	20	140	5
4	Applied Maths	521254(14)	Computer Oriented Numerical Analysis	4	1	0	100	20	20	140	5
5	Management	521255(76)	Introduction to Management Functions	4	1	0	100	20	20	140	5
6	Computer Applications	521261(21)	Data Structures Laboratory	0	0	4	75	–	25	100	2
7	Computer Applications	521262(21)	Programming Laboratory in RDBMS	0	0	4	75	–	25	100	2
8	Computer Applications	521263(21)	Software Technology laboratory II	0	0	4	50	–	25	75	2
9	Humanities	521264(46)	Group Discussion	0	0	2	–	–	25	25	1
10			Library	---	--	1	--	--	--	--	--
			TOTAL	20	5	15	700	100	200	1000	32

*ESE: End Semester Examination CT: Class Test TA: Teacher's Assessment L: Lecture T: Tutorial P: Practical
 Note: Duration of End Semester Examination of all theory papers will be of Three Hours*

Chhattisgarh Swami Vivekanand Technical University Bhilai (C.G.)

SCHEME OF TEACHING & EXAMINATION Master of Computer Applications (MCA) – III Semester

Sl. No.	Board of Study	Subject Code	SUBJECT	Periods Per Week			Scheme of Exam			Total Marks	Credits L+(T+P)/2
				L	T	P	Theory /Practical				
							ESC	CT	TA		
1	Computer Applications	521351(21)	Computer Networks and Communication	4	1	0	100	20	20	140	5
2	Applied Maths	521352(14)	Computer Oriented Optimization	4	1	0	100	20	20	140	5
3	Computer Applications	521353(21)	Formal Languages and Automata Theory	4	1	0	100	20	20	140	5
4	Computer Applications	521354(21)	Unix Operating System and Shell	4	1	0	100	20	20	140	5
5	Computer Applications	521355(21)	Object Oriented Methodology and C++	4	1	0	100	20	20	140	5
6	Computer Applications	521361(21)	Programming Lab in C++	0	0	4	50	–	25	75	2
7	Computer Applications	521362(21)	Unix lab	0	0	4	75	–	25	100	2
8	Computer Applications	521363(21)	Software Technology Lab III	0	0	5	75	–	25	100	3
9	Humanities	521364 (46)	Report Writing & Seminar	0	0	2	–	–	25	25	1
TOTAL				20	5	15	700	100	200	1000	33

L: Lecture

T: Tutorial

P: Practical

ESE: End Semester Examination

CT: Class Test

TA: Teacher's Assessment

Chhattisgarh Swami Vivekanand Technical University Bhilai(C.G.)

SCHEME OF TEACHING & EXAMINATION

Master of Computer Applications (MCA) – IV Semester

S.No.	Board of Study	Subject Code	SUBJECT	Period Per Week			Scheme of Exam			Total Marks	Credit L+(T+P)/2
				L	T	P	Theory / Practical				
							ESC	CT	TA		
1	Computer Applications	521451(21)	Artificial Intelligence and Expert System	4	1	0	100	20	20	140	5
2	Computer Applications	521452(21)	Compiler Design	4	1	0	100	20	20	140	5
3	Computer Applications	521453(21)	Software Engineering	4	1	0	100	20	20	140	5
4	Computer Applications	521454(21)	Advanced JAVA Programming	4	1	0	100	20	20	140	5
5	<i>Refer Table-I</i>		<i>Elective-I</i>	4	1	0	100	20	20	140	5
6	Computer Applications	521461(21)	Artificial Intelligence Lab	0	0	4	50	–	25	75	2
7	Computer Applications	521462(21)	Advanced Java Lab	0	0	4	75	–	25	100	2
8	Computer Applications	521463(21)	Project-I	0	0	5	75	–	25	100	3
9	Computer Applications	521464(21)	Aptitude Training	0	0	2	–	–	25	25	1
TOTAL				20	5	15	700	100	200	1000	33

L: Lecture **T:** Tutorial **P:** Practical
ESE: End Semester Examination **CT:** Class Test **TA:** Teacher's Assessment

Table 1 : List of Elective -I

S.No.	Board of Study	Code	Subject
1	Computer Applications	521471(21)	Neural Network & Fuzzy Logic
2	Computer Applications	521472(21)	Logic & Functional Programming
3	Computer Applications	521473(21)	Network Programming
4	Computer Applications	521474(21)	Modeling & Simulation
5	Computer Applications	521475(21)	Design & Analysis of Algorithms
6	Computer Applications	521476(21)	System Programming
7	Computer Applications	521477(21)	Distributed Operating System
8	Computer Applications	521478(21)	Cloud Computing
9	Computer Applications	521479(21)	Biometric Security

Note:

- 1/4th of total strength of students subject to Minimum Strength of twenty students is required to offer an elective in the college in a particular academic session.
- Choice of elective course once made for an examination cannot be changed for future examinations.

Name of the Programme: Master of Computer Applications (MCA) ::: Duration of the Programme: Three years

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING & EXAMINATION FIFTH SEMESTER MCA

ESE: End Semester Examination CT: Class Test TA: Teacher's Assessment L: Lecture T: Tutorial

S.NO	Board of Study	Subject code	SUBJECT	Period /Week			Scheme of Exam			Total Marks	Credit L +(T+P)/2
				L	T	P	Theory/ Practical				
							ESC	CT	TA		
1	Computer Applications	521551(21)	Cyber Security	4	1	0	100	20	20	140	5
2	Computer Applications	521552(21)	Computer Graphics and Multimedia	4	1	0	100	20	20	140	5
3	Computer Applications	521553(21)	Software Project Management	4	1	0	100	20	20	140	5
4	Refer Table - II		Elective - II	4	1	0	100	20	20	140	5
5	Refer Table - III		Elective-III	4	1	0	100	20	20	140	5
6	Computer Applications	521531(21)	Graphics and Multimedia Lab	0	0	4	50	–	25	75	2
7	Computer Applications	521532(21)	Software Technology Lab-IV	0	0	4	75	–	25	100	2
8	Computer Applications	521533(21)	Project-II	0	0	5	75	–	25	100	3
9	Management	521534(76)	Managerial Skills	0	0	2	–	–	25	25	1
TOTAL				20	5	15	700	100	200	1000	33

P: Practical

** Industrial lectures/seminars should be conducted during the fifth semester*

Table 2 : List of Elective II

S.No.	Board of Study	Code	Subject
1	Management	521571(76)	Managerial Economics
2	Management	521572(76)	Enterprise Resource Planning
3	Management	521573(76)	Organizational Behavior
4	Management	521574(76)	Management Information Systems
5	Management	521575(76)	E-Commerce
6	Management	521576(76)	Management Accounting

Note (1)- 1/4th of total strength of students subject to Minimum Strength of twenty students is required to offer an elective in the college in a particular academic session

Note (2) - Choice of elective course once made for an examination cannot be changed for future examinations.

Table 3 : List of Elective III

S.No.	Board of Studies	Code	Subject
1	Computer Applications	521581(21)	Data Warehousing and Mining
2	Computer Applications	521582(21)	Natural Language Processing
3	Computer Applications	521583(21)	Mobile Computing
4	Computer Applications	521584(21)	Distributed Databases
5	Computer Applications	521585(21)	Robotics & Computer Vision
6	Computer Applications	521586(21)	Parallel Processing
7	Computer Applications	521587(21)	Digital Image Processing
8	Computer Applications	521588(21)	Big data Analytics

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING & EXAMINATION SIXTH SEMESTER MCA

S.NO	Board of Study	Subject code	SUBJECT	Period /Week			Scheme of Exam			Total Marks	Credit L +(T+P)/2
				L	T	P	Theory/ Practical				
							ESC	CT	TA		
1	Computer Applications	521661(21)	Project	4	0	32	300		--	300	20
2	Computer Applications	521662(21)	Seminar on Project		0	4			200	200	2
			TOTAL	4		36	300		200	500	22

General Guidelines for MCA VI semester

- Students are required to take up individual project in companies/Organizations/PSU/Govt. EDP Cell other than the mini project standards already taken up during previous semesters.
- Project should be real time work, for total of 5 months duration.
- Project work may be application oriented or research oriented as per student interest. Therefore the project reports will vary depending on whether it is application oriented project or research based project.
- Regular project work weekly dairy should be maintained by the students, signed by the internal guide in order to verify the regularity of the student.
- Seminars / presentation should be given at Project Completion levels.
- Project verification at the place of project work is mandatory by the internal guide, for completion of the work.
- If project report is not as per the format and not a real time project, external guides will have every right to reject the project
- Students are encouraged and appreciated to show their project code demo along with their power point slide show during their viva-voce exams as an added advantage.

Guidelines for the Preparation of Project Reports

- **Printing Area:** The margins should be: Left: 1.25”, Right: 1.00”, Top and Bottom-1.00”. The text should be justified to occupy the full line width, so that the right margin is not ragged, with words hyphenated as appropriate. Please fill pages so that the length of the text runs to the right margin.

The report must be printed on one side only. Please use a high-resolution printer, preferably a laser printer with at least 300 dpi. Project reports must be printed neatly on