

Table Agenda - in the Meeting - 2.

MINUTES OF THE MEETING OF THE FACULTY OF SCIENCE HELD ON 24-07-2018

A meeting of the Faculty of Science was held on 24-07-2018 at 3:00 PM in the chamber of the Dean, University College of Science. Following members were present in the meeting :-

- | | |
|----------------------------|-----------------|
| 1. Prof. B.L. Ahuja | Chairman |
| 2. Prof. M. Roy | Member |
| 3. Prof. Kanika Sharma | Member |
| 4. Prof. Arti Prasad | Member |
| 5. Prof. L.S. Chauhan | Member |
| 6. Prof. Atul Tyagi | Member |
| 7. Prof. G.S. Rathore | Member |
| 8. Prof. M.K. Jain | Member |
| 9. Dr. Jyoti Chaudhary, | Special Invitee |
| 10. Prof. Rajesh Kr. Dubey | Special Invitee |
| 11. Prof. N. Lakshmi | Special Invitee |
| 12. Dr. Avinash Panwar | |

Prof. P.K. Chaudhary & Prof. P.B. Punjabi could not attend the meeting.

At the outset Chairman of the Faculty of Science welcome the members of the Faculty of Science and thereafter minutes of the meetings of Committee of Courses in Computer Science and issues of Biotechnology were discussed and resolved as under :-

1. The Faculty of Science discussed & considered the Minutes of the meeting of the Committee of Courses in Computer Science held on 17-07-2018. The Faculty of Science resolved to approve the revised syllabi of M.C.A. (3 year), M.C.A. (2 year), M.Sc. (I.T.), B.C.A. (Annual), B.C.A. (Semester) and B.Sc. (Computer Sciences) courses proposed to be started from the academic session 2018-19.
2. **Departmental Committee of Biotechnology** requested the Faculty of Science to establish a separate department with the name of Department of Biotechnology and its upgradation to Centre of Excellence for Biotechnology. After proper & thorough discussion, the Faculty resolved to recommend establishment of Department of Biotechnology and its upgradation to Centre of Excellence for Biotechnology.

TABLE AGENDA :

3. In courses where CBCS has been implemented (except Pharmacy), promotion of students from one semester to next higher be made automatically with the constraint that the student will clear all back papers within 2 years of last semester barring which the degree will be cancelled.
The Faculty also resolved to thoroughly examine and revise the existing CBCS rules.
4. The moderation policy of marks should be reviewed by appropriate body.
The meeting ended with a vote of thanks to the Chair.

1059
26/7/18

(Prof. B.L. Ahuja)
Chairman, Fac. of Sc.

[Signature]
26/07/2018
Department of Biotechnology
Meharshi Sukhadra University

Date - 28.9.18

(20)

मोहनलाल सुखाड़िया विश्वविद्यालय, उदयपुर

MOHANLAL SUKHADIA UNIVERSITY : UDAIPUR
NAAC ACCREDITED 'A' GRADE STATE UNIVERSITY



MMLSU/2018/2084

Dated: 07.08.2018

ORDER

On the recommendation of the Committee of Courses (Computer Science) and Chairman, Faculty of Science, I, Prof. J.P. Sharma, Vice Chancellor of this University in exercise of the powers vested in me under section 12(6) of the Mohanlal Sukhadia University Act, also hereby approve the revised syllabus & schemes of M.C.A. (3 year), M.C.A. (2 year), M.Sc. (I.T.), B.C.A. (Annual), B.C.A. (Semester) and B.Sc. (Computer Sciences) courses proposed to be started from the academic session 2018-19.

Ashama

Prof. J. P. Sharma
Vice Chancellor

Copy forwarded to :

1. The Dean, UCS, MLSU, Udaipur
2. Prof. M.K. Jain, Head, Computer Centre, MLSU, Udaipur with reference to his letter No. CS/VB/MLSU/2018/36 dated 18.07.2018
3. The Dean, PGS/ Comptroller, MLSU, Udaipur
4. The COE/ Dy. Registrar (Exam.)
5. The D.R. Meeting to report in the next meeting of the Academic Council.
6. The Result Incharge, MLSU, Udaipur
7. The P.S. to Vice Chancellor, MLSU, Udaipur
8. The Incharge, University Internet Centre, MLSU, Udaipur
9. The Asstt. Registrar, Estt./ General/ Rectt., MLSU, Udaipur

Arde hite

Arde
REGISTRAR

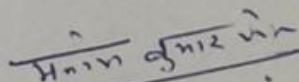
MEETING MINUTES OF COMMITTEE OF COURSES

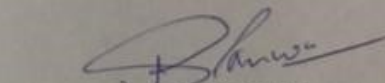
A meeting of committee of courses in Computer Science and IT was held on 11-08-2020 at 11.30 am. Following members attended the meeting:

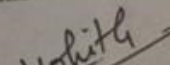
- | | |
|--|-----------------|
| 1. Prof. M. K. Jain, Department of Computer Science | Convener |
| 2. Dr. Avinash Panwar, Head of the Department | Internal Member |
| 3. Mrs. Deepti Shrimal | Internal Member |
| 4. Mr. Mohit Kumar Gokh. roo | Internal Member |
| 5. Prof. Neeraj Bhargav (Via Google Meet)
MDS University, Ajmer, Rajasthan | External Member |
| 6. Sh. D.K. Meena (Via Google Meet)
SBP, Government College, Dungarpur, Rajasthan | External Member |

- First of all Prof. M.K. Jain welcomed all the members of this new committee and introduced all the members of the committee.
- All members unanimously **elected Prof. M.K. Jain as convener** of the committee.
- **Proposed 2 Year MCA Program was discussed and approved** the same. Head was authorized to commence this scheme after getting the direction from the State Government or State Government regulatory body.
- Proposed **Certificate Course in iOS application development was discussed and approved in SFS mode.**
- **Revised syllabi of M.Sc. (IT) and BCA were discussed and approved.**

The meeting ended with thanking all the members


Prof. M. K. Jain


Dr. Avinash Panwar


Mohit

MOHANLAL SUKHADIA UNIVERSITY, UDAIPUR

BACHELOR OF COMPUTER APPLICATION (Semester Scheme with Choice Based Credit System) (Effective from session 2018-21)

1. Duration of the Course

The Bachelor of Computer Application (B.C.A) which will be known as BCA (Semester Scheme with Choice Based Credit System) course will consist of six semester's duration which will be conducted in three years. Each semester will be approximately 5 months (minimum 90 working days in a semester) duration.

2. Eligibility:

Candidates seeking admission to the first semester of BCA programme must have passed 10+2 examination all faculty (Science, Commerce & Science) with at least 50% marks.

3. **Admissions:** Admissions to the first semester of B.C.A shall be made, through merit conducted by the University. The course will be initially offered only in the university campus under Faculty of Science

4. Medium of Instruction

The medium of instruction and examination shall be English.

5. No. of Seats

Total 180 seats on self-finance basis

6. Curriculum

6.1 B.C.A. Programme has a three year, six semester prescribed course structure which in general terms is known as curriculum. It prescribes courses to be studied in each semester as given under courses of study and examination

6.2 B.C.A Programme shall have a curriculum and course contents (syllabi) for the courses recommended by the committee courses in Informatics and Computational Sciences and approved by the academic council of the university.

6.3 The Programme shall follow a credit based semester system. Each academic year is divided in to two semesters as prescribed in 6.1

6.4 Course Credit System/Structure

In general a certain quantum of work measured in terms of credits is laid down as the requirement for a particular degree. A student earns the credits for a particular course by fulfilling the academic requirements viz. attendance and evaluation. The total credits required for completing the B.C.A. program shall be 168. The total number of credits in each semester (I to V semester) shall be 30 and 18 in the VI semester. Number of credits for a course in any semester is calculated as follows.

S. No.	Course	Credits
1	One Lecture or tutorial hr/week	1
2	Two Laboratory hours/week	1
3	Seminar 4hrs/week	2
4	Full semester project	18

semester, the students who have appeared in all the courses in the semester will be allowed to attend the classes of the next higher semester at their own risk. Candidates who are not eligible to be promoted shall have to leave that semester.

- (j) Evaluation of the Project will be carried out centrally at the University Departments only by a committee of examiners as given in para.12 (viii)
- (k) Program Span Period: A candidate admitted to the MSc. program will be required to pass the course within four academic years from the year of admission to the first semester. The span period will be decided as on 1st July of an academic session. During the span period candidate is free to apply for cancellation of the grade awarded to him/her and reappear in the same by re-registering for the same or for any other course including elective courses by paying prescribed fee. In the case of new elective course, he/she shall be required to attend classes and undergo internal assessment and satisfy all the regulations for earning credits including Continuous Internal Assessment grades
- (l) University examination rules for CBCS program approved by the Academic council of the University from time to time shall be applicable to students appearing in the Internal and External Examinations and will over ride the rules given above.

12. Courses of Study and Examination

BCA Semester – I

Paper	Paper Name	L-T-P	Credits	Max. Marks		Total
				University Exam.	Internal Assessment	
Paper-I (BCA-S101)	Introduction to Information Technology & PC Packages	3-1-0	4	80	20	100
Paper-II (BCA-S102)	Business Communication	3-1-0	4	80	20	100
Paper-II (BCA-S103)	Problem solving through C	3-1-0	4	80	20	100
Paper-IV (BCA-S104)	Computer Organization	3-1-0	4	80	20	100
Paper-V (BCA-S105)	Practical-I C Programming Lab.	0-0-8	4	80	20	100
Paper-VI (BCA-S106)	Practical-II ICT & PC Software Lab.	0-0-8	4	80	20	100
Paper-VI (BCA-S107)	Language Lab	1-0-2	2(AP)		50	50
Paper VII (BCA-S108)	Seminar	4	2		50	50
Paper IX (BCA-S109)	Extension Activities (Required to choose one activity from the list of activities)	2	2 (AP)		25	25
Paper X (BCA-S110)	Basic Mathematics-I (Only for those have not studied Maths at 10+2 Level)	3-1-0	4(AP)		100	100
	TOTAL		34 (26)	480	345	825

BCA Semester – II

Paper	Paper Name	L-T-P	Credits	Max. Marks		Total
				University Exam.	Internal Assessment	
Paper-I (BCA-S201)	Computer Architecture	3-1-0	4	80	20	100
Paper-II (BCA-S202)	Basic Physics	3-1-0	4	80	20	100
Paper-III (BCA-S203)	Basic Mathematics-II	3-1-0	4	80	20	100

Paper-IV (BCA-S204)	Object oriented programming using C++	3-1-0	4	80	20	100
Paper-V (BCA-S205)	Object oriented Programming Lab.	0-0-8	4	80	20	100
Paper-VI (BCA-S206)	Microprocessor Lab	0-0-8	4	80	20	100
Paper-VII (BCA-S207)	Communication Skill Lab	0-0-4	2(AP)		50	50
Paper-VIII (BCA-S208)	Seminar	4	2		50	50
SBCA 1209	Environment Studies		2	100		100
SBCA 1704	English		2	100		100
			32 (28)	680	220	900

BCA Semester – III

Paper	Paper Name	L-T-P	Credits	Max. Marks		Total
				University Exam.	Internal Assessment	
Paper-I (BCA-S301)	Database Management	3-1-0	4	80	20	100
Paper-II (BCA-S302)	Data Structure	3-1-0	4	80	20	100
Paper-III (BCA-S303)	Computer Communication and Networks	3-0-2	4	80	20	100
Paper-IV (BCA-S304A or BCA-S304B)	Elective(choose one from following) A. 1.Business organization and Management B. 2.Numerical & Statistical Computing	3-1-0	4	80	20	100
Paper-V (BCA-S305)	Data Structure Lab	0-0-8	4	80	20	100
Paper-VI (BCA-S306)	DBMS Lab	0-0-8	4	80	20	100
Paper-VII (BCA-S307A or BCA-S307B)	Practical Elective(choose one from below) A. Web Design B. Desk Top Publishing	0-0-4	2(AP)		50	50
Paper VIII (BCA-S308)	Seminar	4	2		50	50
Paper IX (BCA-S309)	Extension Activities (Required to choose one activity from the list of activities)	2	2 (AP)		25	25
	TOTAL		(30) 26	480	245	725

BCA Semester – IV

Paper	Paper Name	L-T-P	Credits	Max. Marks		Total
				University Exam.	Internal Assessment	
Paper-I (BCA-S401)	System Analysis & Design	3-1-0	4	80	20	100
Paper-II (BCA-S402)	Fundamentals of operating System	3-1-0	4	80	20	100
Paper-III (BCA-S403)	Java Programming	3-0-2	4	80	20	100

Paper-IV (BCA-S404A / S404B)	Elective (Choose one from below) A. Information Systems B. Business Accounting	3-1-0	4	80	20	100
Paper-V (BCA-S405)	Java programming Lab	0-0-8	4	80	20	100
Paper-VI (BCA-S406)	Operating system Lab.	0-0-8	4	80	20	100
Paper-VII (BCA-S407A / S407B)	Practical Elective(Choose one from following) A. Accounting Software Lab B. Networking Lab	0-0-4	2(AP)		50	50
Paper-VIII (BCA-S408)	Seminar	4	2		50	50
SBCA 1705	Hindi		2	100		100
	TOTAL		30 (28)	580	220	800

BCA Semester – V

Paper	Paper Name	L-T-P	Credits	Max. Marks		Total
				University Exam.	Internal Assessment	
Paper-I (BCA-S501)	Software Engineering	3-0-2	4	80	20	100
Paper-II (BCA-S502)	Data mining	3-0-2	4	80	20	100
Paper-III BCA-S503	Web Technology	3-1-0	4	80	20	100
Paper-IV BCA-S504A/ S504B	Elective A. Network management & Security B. Client Server Computing	3-1-0	4	80	20	100
Paper-V (BCA-S505)	Practical-I: Data mining Lab	0-0-8	4	80	20	100
Paper-VI (BCA-S506)	Practical-II Minor Project Based on Web technology	0-0-8	4	80	20	100
Paper-VII (BCA-S507A/ S507B)	Practical Elective(Choose one from following) A. Web Development Lab B. Advanced Web Tools	0-0-4	2(AP)		50	50
Paper-VIII (BCA-S508)	Seminar	4	2		50	50
	TOTAL		28 (26)	480	220	700

BCA Semester – VI

Paper	Paper Name	Credits	Ma		Total
			University Exam.	Internal Assessment	
Paper-I (BCA-S601)	Project	18	350	100	450
		18			450

Total Credits: 172, 158 credits for calculation of CGPA

MASTER OF SCIENCE IN INFORMATION TECHNOLOGY
(A Choice Based Credit System Effective from 2018-21)

1. Duration of the Course

The Master of Science in Information Technology programme will be of four semesters duration under Choice based Credit system which will be conducted in two years. Each semester will be of approximately 5 months (minimum 90 working days in a semester) duration.

2. Eligibility:

Candidates seeking admission to the first semester of M.Sc.(CBCS) Information Technology must have a B.Sc. or equivalent/B.C.A degree (10+2+3 scheme) with minimum 48% marks and also must have studied Mathematics in their degree programme from a recognized university.

3. Admissions:

Admissions to the first year of M.Sc.(IT) will be made as per admission rules for M.Sc.(CBCS)

4. Medium of Instruction

The medium of instruction and examination shall be English.

5. No. of Seats: As given in the Information bulletin

6. Curriculum

6.1 M.Sc.(IT) programme has a two year , four semester prescribed course structure which in general terms is known as curriculum. It prescribes courses to be studied in each semester as given below

6.2 M.Sc.(IT) programme shall have a curriculum and course contents (syllabi) for the courses recommended by the committee courses in Informatics and Computational Sciences and approved by the academic council of the university.

6.3 The programme shall follow Choice Based Credit System(CBCS) and will be governed by the Common Rules and Regulations of Masters programme under CBCS approved by the Academic Council of the University.

7. Courses of Study and Examination (2018-21)

Semester – I

course	Paper Name	L-T-P	No.of credits	Max. Marks		Total
				University Exam.	Internal Assessment	
1	2		3	4	5	6
M1MIT01-CT01	Computer Architecture	3-1-0	4	80	20	100
M1MIT02-CT02	Introduction to Programming	3-0-2	4	80	20	100
M1MIT03-CT03	Data Structure	3-1-0	4	80	20	100
M1MIT04-CT04	Discrete Mathematics	3-1-0	4	80	20	100
M1MIT05-CP01	Practical-I Data Structure Programming	0-0-8	4	80	20	100
M1MIT06-CP02	Practical-II Web Development Using HTML & CSS	0-0-8	4	80	20	100
M1MIT07-SP01	Communication & Presentation Skill	0-0-4	2AC	80	20	100
	TOTAL		24(26)			

Courses of Study and Examination (2018-21)

Semester – II

course	Paper Name	L-T-P	No.of credits	Max. Marks		Total
				University Exam.	Internal Assessment	
1	2		3	4	5	6
M2MIT01-CT05	Database Systems	3-0-2	4	80	20	100
M2MIT02-CT06	Operating System	3-0-2	4	80	20	100
M2MIT03-CT07	Algorithms	3-0-2	4	80	20	100
M2MIT04-CT08	Object Oriented Programming using C++	3-0-2	4	80	20	100
M2MIT05-CP03	Practical-I: Algorithm Implementations	0-0-8	4	80	20	100
M2MIT06-EP01X	Practical-II: Elective Lab-I : Web Application Development A. Web Development using Dot NET B. Web Development using PHP & MYSQL	0-0-8	4	80	20	100
M2MIT07-EP02X	Practical-III: Minor Project or Elective skill Enhancement Course- I	0-0-6	3	80	20	100
	Total		27			

Courses of Study and Examination (2018-21)

Semester – III

course	Paper Name	L-T-P	No.of credits	Max. Marks		Total
				University Exam.	Internal Assessment	
1	2		3	4	5	6
M3MIT01-CT09	Computer Networks	3-1-0	4	80	20	100
M3MIT02-CT10	Java Programming	3-0-2	4	80	20	100
M3MIT03-ET01X	Elective -1 A. Introduction to Data Science B. Computer Graphics	3-0-2	4	80	20	100
M3MIT04-ET02X	Elective-2 A. Software Engineering B. Image Processing	3-0-2	4	80	20	100
M3MIT05-EP03X	Practical-I: Elective Lab-II A. Android Programming B. Microprocessor & Micro-controller Programming	0-0-8	4	80	20	100
M3MIT06-EP04X	Practical-II: Elective Lab-III A. Big Data Analytics B. Cloud Computing C. Web Application Project	0-0-8	4	80	20	100
M3MIT07-EP05X	Practical-III: Minor Project OR Elective Skill Enhancement Course- II	0-0-6	3	80	20	100
M3MIT08-SP02X	Elective Skill Enhancement Course- III	0-0-4	2AC	80	20	100
	Total		27(29)			

Courses of Study and Examination (2018-21) Semester – IV

course	Paper Name	L-T-P	No.of credits	Max. Marks		Total
				University Exam.	Internal Assessment	
1	2		3	4	5	6
M4MIT01-PW01	Project Work	0-0-36	18	80	20	100
Total Credits: Final Semester Project External Examination will be conducted at the University Department/Computer Centre by a Committee						

MOHANLAL SUKHADIA UNIVERSITY: UDAIPUR

MASTER OF COMPUTER APPLICATION PROGRAMME

(A Choice Based Credit System Effective from Even Semester Session 2021-22)

Common Rules and Regulations applicable for the Masters Program in Computer Application from the even Semester of the session **2021-22** in accordance with the Common rules and regulation for Masters Programme in Science under CBCS approved by the Academic council meeting on 13-6-2015

1. Duration of the Program

The Master of Computer Application program shall be of four semester's duration which will be conducted in two years. Each semester will be approximately 5 months (minimum 90 working days in a semester) duration.

2. Eligibility:

As per RMCAPP

3. Admissions:

Admissions to the first semester of M.C.A program shall be made on the basis of common admission policy of the State Government.

4. Medium of Instruction

The medium of instruction and examination shall be English.

5. No. of Seats

Maximum number of seats in the program of study will be decided by the committee of courses concerned on the basis of number of permanent teachers and the laboratory facilities available to teach each course of the program and will be notified after the approval of the competent bodies.

6. Curriculum under Choice Based Credit System

Course Curriculum

2-Year M.C.A Degree Programme (Batch 2020-22) Credit Structure Distribution of Total Credits & Contact Hours in all Semesters

S. No.	Semester Number	Credits/Semester	Contact hours/week
1	I	32	50
2	II	32	40
3	III	32	40
4	IV	24	36
	Total	120	166

Course Structure: M.C.A. (For session 2022-23 onwards) Semester – I

S. No.	Course Code	Course Title	L	T	P	Credit(s)	Internal	External	Total
1	MCA-T101	Web Technologies	3	1	0	4	20	80	100
2	MCA-T102	Operating System	3	1	0	4	20	80	100
3	MCA-T103	Database Management System	3	1	0	4	20	80	100
4	MCA-T104	MIS & E-Commerce	3	1	0	4	20	80	100
5	MCA-T105	Python Programming	3	1	0	4	20	80	100
6	MCA-T106	Advanced Data Structure	3	1	0	4	20	80	100
7	MCA-P101	DBMS Lab	0	0	8	4	20	80	100
8	MCA-P102	Python Programming Lab	0	0	8	4	20	80	100
9*	MCA-B101	Data Structure	3	1	0	Audit	20	80	
10*	MCA-B102	Basic Mathematics	3	1	0	Audit	20	80	
Total Credits						32			
Total Contact hours /week						50			
Total Marks							160	640	800

*Bridge Course [For students other than BCA / B.Sc. (CS/IT) or 12th level]

It will be an audit course for Non Computer Graduates. No Marks will be added. But Student has to pass this Course; in order have basic knowledge of Computer Science.

Guidelines for Evaluation of Bridge Course

Students except BCA / B.Sc. (CS/IT) have to qualify a Bridge Course as per University norms.

- Bridge course shall be an Audit Course whose award shall not be considered for overall MCA Course credit and percentage. However, the grades will be reflected in the mark sheet of the student.

- The students have to clear the Bridge Course before the End Term Examination of third semester.

Semester – II (For session 2021-22 onwards)

S. No.	Course Code	Course Title	L	T	P	Credit(s)	Internal	External	Total
1	MCA-T201	Design & Analysis of Algorithms	3	1	0	4	20	80	100
2	MCA-T202	Java Programming	3	1	0	4	20	80	100
3	MCA-T203	Software Engineering	3	1	0	4	20	80	100
4	MCA-T204	Computer Networks	3	1	0	4	20	80	100
5	MCA-T205	Computer Architecture	3	1	0	4	20	80	100
6	MCA-E206	Departmental Elective I	3	1	0	4	20	80	100
7	MCA-P201	Minor Project	0	0	8	4	20	80	100
8	MCA-P202	Java Programming Lab	0	0	8	4	20	80	100
		Total credits				32			
		Total Contact hours/week				40			
		Total					160	640	800

Semester – III (For session 2022-23 onwards)

	Course Code	Course Title	L	T	P	Credit(s)	Internal	External	Total
1	MCA-T301	Artificial Intelligence and Machine Learning	3	1	0	4	20	80	100
2	MCA-T302	Digital Marketing	3	1	0	4	20	80	100
3	MCA-T303	Embedded Systems	3	1	0	4	20	80	100
4	MCA-T304	Information Systems & Cyber Security	3	1	0	4	20	80	100
5	MCA-E305	Departmental Elective-II	3	1	0	4	20	80	100
6	MCA-E306	Departmental Elective-III	3	1	0	4	20	80	100
7	MCA-P301	Embedded Systems Lab	0	0	8	4	20	80	100
8	MCA-P302	Artificial Intelligence and Machine Learning Lab	0	0	8	4	20	80	100
		Total Credits				32			
		Total Contact hours/week				40			
		Total Marks					160	640	800

Semester – IV (For session 2021-22 onwards)

	Course Code	Course Title	L	T	P	Credit(s)
1	MCA-P401	Industry Project	0	0	36	24
Total Credits						24
Total Contact hours/week						36
Total Marks(Internal + External)						20+80=100

List of Departmental Elective(s) – I

S. No	Course Code	Course Title	L	T	P	Credit
1.	MCA-E206-1	Content Management and Web Development	3	1	0	4
2.	MCA- E206-2	Cloud Computing	3	1	0	4
3.	MCA- E206-3	Real Time Systems	3	1	0	4
4.	MCA- E206-4	Business Intelligence in ERP System	3	1	0	4
5.	MCA- E206-5	Image Processing	3	1	0	4
6.	MCA- E206-6	Mobile Computing	3	1	0	4

List of Departmental Elective(s) – II

S. No	Course Code	Course Title	L	T	P	Credit
1.	MCA- E305-1	Software Testing	3	1	0	4
2.	MCA- E305-2	Robotics	3	1	0	4
3.	MCA- E305-3	Internet of Things	3	1	0	4
4.	MCA- E305-4	Compiler Design	3	1	0	4
5.	MCA- E305-5	Bio-Informatics	3	1	0	4

List of Departmental Elective(s) – III

S. No	Course Code	Course Title	L	T	P	Credit
1.	MCA- E306-1	Ethical Hacking and Digital Forensics	3	1	0	4
2.	MCA- E306-2	Data Mining and Data Warehousing	3	1	0	4
3.	MCA- E306-3	Soft Computing	3	1	0	4
4.	MCA- E306-4	Ad Hoc Networks	3	1	0	4
5.	MCA- E306-5	Natural Language Processing	3	1	0	4

M.C.A. SEMESTER – I

MCA-T101 Web Technologies

UNIT I

Introduction of HTML: introduction, markup language, editing HTML: common tags, headers, text styles, linking, images, formatting text, horizontal rules and more line breaks, unordered lists, nested and ordered lists, basic HTML tables: intermediate HTML tables and formatting: basic HTML forms, more complex HTML forms, HTML5: Input Types & Attributes, internal linking, creating and using image maps

UNIT II

Java script Introduction to scripting: introduction- memory concepts- arithmetic- decision making. Java script control structures, Java script functions: introduction, program modules in java script - function definitions, duration of identifiers, scope rules, recursion, java script global functions. Java script arrays: introduction, array-declaring and allocating arrays, introduction to DHTML and J Query.

UNIT III

CSS: introduction, inline styles, creating style sheets with the style element, conflicting styles, linking external style sheets, positioning elements, backgrounds, element dimensions, text flow and the CSS box model, user style sheets.

UNIT IV

HTML : HTML form using GET, POST, REQUEST, SESSION, COOKIE variables, Sending E-mail, Database Operations with PHP, Connecting to My-SQL (or any other database), selecting a db.

UNIT V

Introduction to PHP & web server Architecture Model Overview of PHP Capabilities, PHP HTML embedding tags & syntax, Simple script examples, PHP & HTTP Environment variables. PHP Language Core-Variables, constants, data types, PHP operators, flow control & loops, Arrays, string, functions Include & require statements, Simple File & Directory access operations, Error handling, Processing