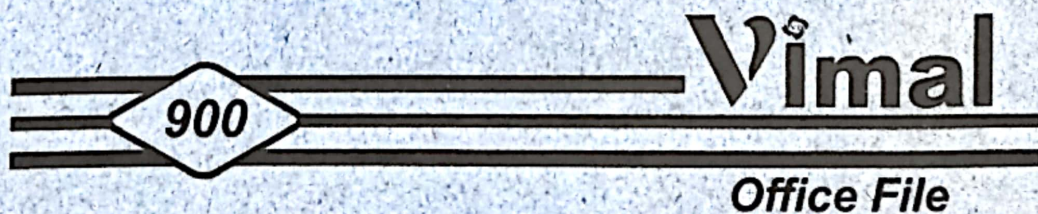


File No.: \_\_\_\_\_

**B. C. A.**  
**Syllabus 2024**



Circular file

- 22 -

**DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY****CIRCULAR NO.SU/BCA/CBC & GS/15/2018**

In Supersession of the Circular No. Su/BCA/CBC & GS/12/2018 18062-312 dated 20-8-2018 along with the syllabi of first to third year. It is further informed to all concerned that, **As decided by the Academic Council held on 30-06/02-07-2018 the syllabi of BCA Ist Year, Semester Ist as circulated earlier vide No.su/2018/14151-551 dated 17-07-2018 is remained unchanged and uploaded on the University web site [www.bamu.ac.in](http://www.bamu.ac.in).**

This is effective from the Academic Year 2018-2019 and onwards

Kindly take a note of this circular and bring notice to the students, teachers and staff for their information and necessary action.

University Campus,  
Aurangabad-431 004.

REF.NO.SU/MGT/2018-19/18358 -

Date:- 31-08-2018.

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*[Signature]*  
**Deputy Registrar,  
Syllabus Section.**

**Copy forwarded with compliments to :-**

- 1] **The Principals, affiliated concerned Colleges, Dr. Babasaheb Ambedkar Marathwada University.**
- 2] **The Director, University Network & Information Centre, UNIC, with a request to upload this Circular on University Website.**

**Copy to :-**

- 1] The Director, Board of Examinations & Evaluation,
- 2] **The Section Officer, [ B.Com.Unit ] Examination Branch,**
- 3] The Section officer, [Eligibility Unit],
- 4] **The Programmer [Computer Unit-1] Examinations,**
- 5] **The Programmer [Computer Unit-2] Examinations,**
- 6] The In-charge, [E-Suvidha Kendra],
- 7] The Public Relation Officer,
- 8] The Record Keeper,

**DR. BABASAHEB AMBEDKAR  
MARATHWADA UNIVERSITY,  
AURANGABAD.**



**Curriculum of**  
**BACHELOR OF COMPUTER APPLICATION**  
**(BCA)**  
**1ST YEAR**  
**under Choice Based Credit & Grading System**  
**SEMESTER FIRST**

*[ Effective from the Academic Year 2018-19 & onwards ]*

DR. BABASAHEB AMBEDKAR MARATHIWADA UNIVERSITY, AURANGABAD.

FACULTY OF MANAGEMENT SCIENCE.

Syllabus - Bachelor of Computer Application (BCA)

Choice Based Credit System (CBCS) - 2018-19

Semester & Credits	Core Course [04]	Ability Enhancement Compulsory Courses [AEC] [01]	Discipline Specific Elective [DSE] [01]
I Credit 24	1. Accountancy – I 2. Industrial Economics 3. Business Statistics 4. Operating System – I	1. Communication Skills	Elective Paper [Any One] 1. Office Automation Tools 2. Basic Web Technology - I
Total Credits 24	No. of Credits : 16	No. of Credits :04	No. of Credits : 04



## FIRST SEMISTER

Paper Number	Subject/ Title of the Paper	Course	Weekly		Credits		IA	UA	Total Marks	Duration of Theory Exam
			Th	Pr	Th	Pr				
I	Financial Accounting – I	Core Course	4	-	4	-	20	80	100	3 Hrs
II	Industrial Economics	Core Course	4	-	4	-	20	80	100	3 Hrs
III	Business Statistics	Core Course	4	-	4	-	20	80	100	3 Hrs
IV	Operating System – I	Core Course	2	4	2	2	20	80	100	3 Hrs
V	Business Communication	Ability Enhancement Compulsory	4	-	4	-	20	80	100	3 Hrs
VI	1.Office Automation Tools 2.Basic Web Technology –I	Discipline Specific Elective [Any One]	2	4	2	2	20	80	100	3 Hrs
	Total		20	8	20 + 4 =24		120	480	600	--

**B.SC (Computer Science)**  
**Syllabus file**  
**P-2014 Pattern**



**OFFICE FILE**  
**No. 5**

## Dr. Babasaheb Ambedkar Marathwada University, Aurangabad

## Curriculum Structure and Scheme of Evaluation: B.Sc.(C.S.)

Sr. No.	Paper Number	Name of the Paper Titles	Scheme of Teaching	Scheme of Evaluation(Marks)		
			Theory / Practical (hrs / week )	Theory / Practical ( Marks )	Exam Duration ( in hrs.)	Total Marks
I Semester						
1	CS101-T	Computer Fundamentals	3	50	2	50
2	CS102-T	Digital Electronics	3	50	2	50
3	CS103-T	Microprocessor - I	3	50	2	50
4	CS104-T	C Programming – I	3	50	2	50
5	CS105-T	Communication Skill – I	3	50	2	50
6	CS106-T	Mathematical Foundation	3	50	2	50
7	CS107-P	Office Suite	4	50	2	50
8	CS108-P	Digital Electronics	4	50	2	50
9	CS109-P	Microprocessor – I	4	50	2	50
10	CS110-P	C Programming – I	4	50	2	50
II Semester						
1	CS201-T	Data Structure	3	50	2	50
2	CS202-T	Operating System	3	50	2	50
3	CS203-T	Microprocessor – II	3	50	2	50
4	CS204-T	C Programming – II	3	50	2	50
5	CS205-T	Communication Skill – II	3	50	2	50
6	CS206-T	Numerical Computation Methods	3	50	2	50
7	CS207-P	Data Structure	4	50	2	50
8	CS208-P	Microprocessor – II	4	50	2	50
9	CS209-P	C Programming – II	4	50	2	50
10	CS210-P	Numerical Computation Methods	4	50	2	50



**CIRCULAR NO.SU/B.Sc./31/2022**

It is hereby inform to all concerned that, the syllabi prepared by the Ad-hoc Board and recommended by the Dean, Faculty of Science & Technology, the Hon'ble Vice-Chancellor has accepted the **following revised syllabi of Bachelor of Science Degrees with Regulation under the scheme of Choice Based Credit & Grading System** in his emergency powers under section 12(7) of the Maharashtra Public Universities Act, 2016 on behalf of the Academic Council as appended herewith. Earlier published syllabus vide circular dtd. 19.09.2022 is stand cancelled.

Sr.No.	Courses	Semester
1.	B.Sc. Information Technology (Degree)	Ist semester
2.	B.Sc. Computer Science (Degree)	Ist semester
3.	B.C.A.(Science) (Degree)	Ist semester

This is effective from the Academic Year 2022-23 and onwards.

All concerned are requested to note the contents of this circular and bring the notice to the students, teachers and staff for their information and necessary action.

University Campus,  
Aurangabad-431 004.  
REF.NO.SU/2022/12788-89  
Date:- 19.10.2022.

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**Deputy Registrar**  
**Academic (Syllabus)**

**Copy forwarded with compliments to :-**

- 1] **The Principal of all concerned Colleges,**  
Dr. Babasaheb Ambedkar Marathwada University,
- 2] **The Director, University Network & Information Centre, UNIC, with a request to upload this Circular on University Website.**

**Copy to :-**

- 1] **The Director, Board of Examinations & Evaluation, Dr.BAMU,A'bad.**
- 2] **The Section Officer,[B.Sc.Unit] Examination Branch,Dr.BAMU,A'bad.**
- 3] **The Programmer [Computer Unit-1] Examinations, Dr.BAMU,A'bad.**
- 4] **The Programmer [Computer Unit-2] Examinations, Dr.BAMU,A'bad.**
- 5] **The In-charge,[E-Suvidha Kendra], Rajarshi Shahu Maharaj Pariksha Bhavan, Dr.BAMU,A'bad.**
- 6] **The Public Relation Officer, Dr.BAMU,A'bad.**
- 7] **The Record Keeper, Dr.BAMU,A'bad.**

**Dr. Babasaheb Ambedkar Marathwada University**  
**Aurangabad- 431004( MS) India**



**Three Year Undergraduate Bachelor Degree Program**  
**In Science and Technology**

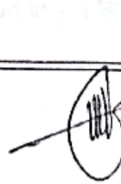
**B. Sc. (Computer Science)**

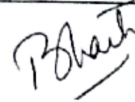
**Curriculum Structure and Scheme of**  
**Examination**

**Choice Based Credit System**

**(Effective from Academic Year 2022-23)**

**Dr. Babasaheb Ambedkar Marathwada University**  
**Aurangabad – 431004 (MS) India**

  
Dean  
Faculty of Science & Technology  
Dr. Babasaheb Ambedkar Marathwada  
University, Aurangabad



## Pattern of Question Paper (Theory)

B.Sc. (Computer Science) Semester -----

Course Code -----

Paper Number -----

Title of Paper -----

Time : 1.30 Hrs.

Max Marks: 40

**N.B.**

1. Attempt All Questions.
2. All questions carry equal marks.
3. Illustrate your answer with suitable labelled diagram.

Q.1. Multiple choice questions / Fill In the Blanks / Terms / Definition / One Line Answer questions.

(10 Marks)

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)
- 7)
- 8)
- 9)
- 10)

Q.2. Long answer question.

OR

(10 Marks)

Long Answer question

Q.3. Long answer question

OR

(10 Marks)

Short answer questions

- a)
- b)

Q.4. Short Notes on any TWO of the following:-

(10 Marks)

- a)
- b)
- c)
- d)

*Bhate*

## Pattern of Question Paper(Practical)

B.Sc. (Computer Science) Semester -I and II

Course Code -----

Paper Number -----

Title Of Paper -----

Time : 3:00 Hrs.

Max Marks : 100 (UA:80+IA:20)

B.

- . Attempt All Questions.
- . All questions carry equal marks.
- . Illustrate your answer with suitable labelled diagram

### Section A

Q:1 Experiment based on CS-123 P (50 Marks)

- a) Question / Experiment– 35 Marks
- b) Viva / Oral – 05 Marks
- c) Internal Evaluation : 07 Marks
- d) Record book : 03 Marks

### Section B

Q:2 Experiment based on CS-223 P (50 Marks)

- e) Question / Experiment– 35 Marks
- f) Viva / Oral – 05 Marks
- g) Internal Evaluation : 07 Marks
- h) Record book : 03 Marks

# Dr. Babasaheb Ambedkar Marathwada University, Aurangabad

Choice Based Credit System (CBCS) Curriculum

For

Faculty of Science and Technology

Course Structure (First Year)

**B. Sc. (Computer Science) Science Three Year Undergraduate Degree Program**

## First Year

Course Type	Semester - I		Course Type	Semester - II	
	Name of Paper	Credit		Name of Paper	Credit
Core Course I DSC-1A 5.5	Computer Fundamentals	2	Core Course IV DSC-1B 5.5	Data Structure	2
	Digital Electronics	2		8086 Microprocessor	2
	Lab Course	1.5		Lab Course	1.5
Core Course II DSC-2A 5.5	Operating System-I	2	Core Course V DSC-2B 5.5	Operating System-II	2
	Programming in C	2		Advanced Programming in C	2
	Lab Course	1.5		Lab Course	1.5
Core Course III DSC-3A 5.5	Mathematical Foundation M-1	2	Core Course VI DSC-3B 5.5	Numerical Methods-M-2	2
	Programming Methodology	2		Database Management System	2
	Lab Course	1.5		Lab Course	1.5
Ability Enhancement Compulsory Courses (AECC), 01 Course, 3 credit each)	English Communication Skills (Linguistic Approach)	3	Ability Enhancement Compulsory Courses (AECC), 01 Course 3, credit each )	English Communication Skills (Soft Skill Development)	3
	Marathi/Hindi/Urdu/Arabic	3		Marathi/Hindi/Urdu/Arabic	3
Non-Credit Course	-----	----	Non-Credit Course	Constitution of India	--
Total Credit	22.5			22.5	

Structure and Curriculum for  
Bachelor of Science (B.Sc.) Computer Science  
(Choice Based Credit System)  
Dr. Babasaheb Ambedkar Marathwada University, Aurangabad  
Choice Based Credit System (CBCS) Curriculum  
For  
Faculty of Science and Technology  
Course Structure and Scheme of Examination  
B. Sc. (Computer Science) Three Year Under Graduate Degree Program

Semester-I								
Course Type	Course Code	Course Title	Total Periods (Teaching Periods / Week)	Credits	Scheme of Examination			
					UA	IA	Max Marks	Min Marks
Core Course I (DSC-1A)	CS-111T	Computer Fundamentals	45 (3/per week)	2	40	10	50	20
	CS-112T	Digital Electronics	45 (3/per week)	2	40	10	50	20
	CS-121P	Lab Course (based on CS- 111T and CS-112T)	45 (3/per week)	1.5	40	10	50	20
Core Course II (DSC-2A)	CS-113T	Operating System-I	45 (3/per week)	2	40	10	50	20
	CS-114T	Programming in C	45 (3/per week)	2	40	10	50	20
	CS-122P	Lab Course (based on CS- 113T and CS-114T)	45 (3/per week)	1.5	40	10	50	20
Core Course III (DSC-3A)	CS-115T	Mathematical Foundation	45 (3/per week)	2	40	10	50	20
	CS-116T	Programming Methodology	45 (3/per week)	2	40	10	50	20
	CS-123P	Lab Course (based on CS- 115T and CS-116T)	45 (3/per week)	1.5	40	10	50	20
Ability Enhancement Compulsory Courses (AECC-I)	CS-131T	English communication Skills(linguistic Approach)	45 (5/per week)	3	40	10	50	20
	CS-132T	Marathi/Hindi/Urdu/ Arabic	45 (4/per week)	3	40	10	50	20
Non Credit Course								
		36 Period Per week		22.5	440	110	550	220
*DCS – discipline Specific core courses Total Credit for Semester I : 22.5 (Theory : 18 : Laboratory : 4.5)								

Structure and Curriculum for  
Bachelor of Science (B.Sc.) Computer Science  
(Choice Based Credit System)  
**Dr. Babasaheb Ambedkar Marathwada University, Aurangabad**

Choice Based Credit System (CBCS) Curriculum

For

Faculty of Science and Technology

Course Structure and Scheme of Examination

B. Sc. (Computer Science) Three Year Under Graduate Degree Program

**Semester-II**

Course Type	Course Code	Course Title	Total Periods (Teaching Periods / Week)	Credits	Scheme of Examination			
					UA	IA	Max Marks	Min Marks
Core Course IV (DSC-I B)	CS-211T	Data Structure	45 (3/per week)	2	40	10	50	20
	CS-212T	8086 Microprocessor	45 (3/per week)	2	40	10	50	20
	CS-221P	Lab Course (based on CS-211T and CS-212T)	45 (3/per week)	1.5	40	10	50	20
Core Course V (DSC-II B)	CS-213T	Operating System- II	45 (3/per week)	2	40	10	50	20
	CS-214T	Advanced Programming in C	45 (3/per week)	2	40	10	50	20
	CS-222P	Lab Course (based on CS-213T and CS-214T)	45 (3/per week)	1.5	40	10	50	20
Core Course VI (DSC-III B)	CS-215T	Numerical Methods M-2	45 (3/per week)	2	40	10	50	20
	CS-216T	Database Management System	45 (3/per week)	2	40	10	50	20
	CS-223P	Lab Course (based on CS-215T and CS-216T)	45 (3/per week)	1.5	40	10	50	20
Ability Enhancement Compulsory Courses (AECC - 2)	CS-231T	English Communication Skills(Soft Skill Development)	45 (5/per week)	3	40	10	50	20
	CS-232T	Marathi/Hindi/Urdu/Arabic	45 (4/per week)	3	40	10	50	20
Non Credit Course	CS-261T	Constitution of India	45 (3/per week)	2*				
			36 Period Per week	22.5	440	110	550	220

\*DCS - discipline Specific core courses Total Credit for Semester I : 22.5 (Theory : 18 : Laboratory : 4.5)

**M.L.I.Sc. (Master of Library  
and Information Science)  
Syllabus 2024**



**OFFICE FILE  
No. 5**

## [II] Course Schedule:

### First Semester

Course Code	Course Name	Core/ Electives	Credit	Marks
LISc101T	Foundations of Information Science ✓	Core	4	100
LISc101P	Practical based on LISc101T	Core	2	50
LISc102T	Knowledge Organization	Core	4	100
LISc102P	Practical based on LISc102T	Core	4	100
LISc103T	Information Sources & Services	Core	4	100
LISc103P	a) Information Sources	Core	2	50
	b) Compilation of Documentation list	Core	2	50
LISc104T	Electives/ Cafeteria	Electives	4	100
	104A1T: Information Search Strategies			
	104A2T: Information Literacy			
	104A3T: Use of Non-Book Material			
LISc104P	Practical based on LISc104T	Electives	2	50

### Second Semester

Course Code	Course Name	Core/ Electives	Credit	Marks
LISc201T	Management of Libraries & Information Centres/ Institutions	Core	4	100
LISc201P	Practical based on LISc201T	Core	2	50
LISc202T	Information Processing	Core	4	100
LISc202P	Practical based on LISc202T	Core	4	100
LISc203T	Information Technology- Basics	Core	4	100
LISc203P	Practical based on LISc203T	Core	4	100
LISc204T	Electives/ Cafeteria	Electives	4	100
	204A1T: Electronic Information Sources ✓			
	204A2T: Technical Writing			
	204A3T: Electronic Publishing			
LISc204P	Practical based on LISc204T	Electives	2	50

### Third Semester

Course Code	Course Name	Core/ Electives	Credit	Marks
LISc301T	Research Methods & Statistical Techniques	Core	4	100
LISc302T	Information Technology- Applications	Core	4	100
LISc302P	Practical based on LISc302T	Core	4	100
LISc303T	Information Analysis, Repackaging & Consolidation	Core	4	100
LISc303P	Practical based on LISc303T	Core	2	50
LISc304T	Electives/ Cafeteria	Electives	4	100
	304A1T: Documentation			
	304A2T: Archives Management			
	304A3T: Information Reading Skills			
LISc304P	Practical based on LISc304T	Electives	2	50

### Fourth Semester

Course Code	Course Name	Core/ Electives	Credit	Marks
LISc401T	Information Retrieval	Core	4	100
LISc401P	Practical based on LISc401T	Core	2	50
LISc402T	Project Work	Core	4	100
LISc402P	Seminar	Core	2	50
LISc403T	Core Electives 403A1T: Marketing of Libraries & Information Centres ✓ 403A2T: Rural and Community Information Systems 403A3T: Health Information Systems	Core Elective	4	100
LISc403P	Practical based on LISc403T	Core Elective	2	50
LISc404T	Electives/ Cafeteria 404A1T: Web Page Design ✓ 404A2T: Intellectual Property Rights ✓ 404A3T: Thesaurus Construction	Electives	4	100
LISc404P	Practical based on LISc404T	Electives	2	50

### [III] Syllabus

### First Semester

#### LISc101T Foundations of Information Science (Theory) (Credit 4)

#### No. of Lectures/ Unit

#### 08 Unit 1. Information and Communication

- Information, Characteristics, Nature, Value and Use of Information
- Conceptual difference between Data, Information and Knowledge
- Communication of Information: Information generation
- Trends in Scientific Communication

#### 09 Unit 2. Information Science

- Definition, Scope and Objectives
- Information Science as a discipline and its relationship with other subjects

#### 12 Unit 3. Library, Information and Society

- Genesis, Characteristics and implications of Information Society
- Changing role of Library and Information Centres in Society
- Information Industry Generations, Providers & Intermediaries
- Intellectual Property Act Right to Information Acts
- Concept of Freedom, Censorship, Data Security and Fair Use

- Policies relating to Information, Right to Information including Sciences and Technology, Education.
- International and National Programmes & Policies ( NAPLIS), IT & Library, UAP, UBC.
- 08 **Unit 4. Library as Social Institution**
  - Social and historical foundations of Library
  - Different types of Libraries – their distinguishing features and functions
  - Role of Library in formal and informal education
- 08 **Unit 5. Normative Principles of Library & Information Science**
  - Five laws of Library Science
  - Implications of Five laws in Library and Information activities
- 08 **Unit 6. Library Development**
  - Development of Libraries with special reference to India
  - Resource sharing and Library Networking
- 08 **Unit 7. Laws relating to Libraries & Information**
  - Library Legislation need and essential features
  - Library Legislation in India
  - Press and Registration Act and Delivery of Books (Public Library) Act
  - Copy Right Act
- 08 **Unit 8. Library & Information Profession**
  - Attribution of profession
  - Librarianship as a profession
  - Professional ethics
  - Professional associations and their role
  - National and International Library Associations
  - Professional Education and Research
- 08 **Unit 9. Promoters of Library and Information Services**
  - National level promoters --- RRRLF
  - International level promoters --- UNESCO
- 08 **Unit 10. Public relations and Extension activities**
  - Definition
  - Facets and Programs
  - Publicity and Extension, Out reach activities
  - Library Path Finders (Guides)
  - Consultancy including promotional Web Tools

LISc101P **Foundations of Information Science (Practical)**  
(Credit 2)  
60 Practical based on LISc45101T