EXAM SYLLABUS

Cluster University UG 1st Semester BCA Syllabus 2026

5 subjects · 39 topics · 180 min · 100 marks

Official Cluster University UG 1st Semester BCA Syllabus 2026. Covers Computer Fundamentals, Programming, and basic mathematics. Essential for exam preparation.

WHAT TO STUDY FIRST

Begin with Computer Fundamentals to build a strong base. Then, move on to programming concepts, as they are crucial for BCA. Finally, cover the mathematical topics. Ensure to refer to standard textbooks and university-provided materials.

EXAM PATTERN

180 min · 100 marks · Mixed

Undergraduate 1st Semester Bachelor of Computer Applications (BCA) Examination

Marking: +4 / -1 for entrance exams (CUET). For internal exams, marking is question-specific and unit-wise, typically with no negative marking for semester-end exams. Internal assessment contributes significantly (20-25%).

Negative: Typically not applied in semester-end examinations, but may apply to entrance exams like CUET.

Section A (Short Answer/Objective Type)

MCQ (for entrance exams), Short Answer Questions (1-2 marks)

Section B (Medium/Long Answer Type)

Medium Answer Questions, Long Answer Questions

Internal/Continuous Assessment

20 marks

Tests, Assignments, Attendance, Class Participation

· Admission to BCA often requires qualifying CUET.
· Exam pattern includes both internal/continuous assessment and semester-end theory examinations.
· Semester-end exams often have multiple-choice questions (entrance), short answer, medium answer, and long answer type questions.
· Internal assessment accounts for 20-25% of the total marks.
· Duration for theory papers typically ranges from 2 to 3 hours.
· Syllabus coverage is usually unit-wise with specific question distribution.

SUBJECT-WISE SYLLABUS

01 Computer Fundamentals

12 topics · Not specified

RECOMMENDED BOOKS

— Foundations of Computing by P.K Sinha and P.Sinha

— Fundamentals of Computers by V.Rajaraman

— PC Software for Windows by R.k Taxali

— Computer Fundamentals by A. Goel

1 Introduction to Computer

2 Components of Computer

3 Generations of Computers

4 Application of Computers

5 Types of Computers

6 Input and Output Devices

7 Concept of Hardware and Software

8 Types of Software

9 Introduction to Free and Open Source Software

10 Definition of Computer Virus

11 Types of Viruses

12 Uses of Antivirus Software

02 Programming

8 topics · Not specified

RECOMMENDED BOOKS

— Programming in C by E. Balagurusamy

— Let Us C by Yashavant Kanetkar

1 Introduction to Programming

2 Algorithms and Flowcharts

3 Basic Syntax

4 Variables and Data Types

5 Operators

6 Control Flow Statements (if-else, switch, loops)

7 Functions and Recursion

8 Arrays

03 Mathematics

5 topics · Not specified

RECOMMENDED BOOKS

— NCERT Mathematics Textbooks (Class XI & XII)

— Objective Mathematics for Competitive Examinations by R.D. Sharma

1 Set Theory and Relations

2 Matrices and Determinants

3 Basic Calculus (Differentiation and Integration)

4 Coordinate Geometry

5 Probability and Statistics

04 Communicative English / English

8 topics · Not specified

RECOMMENDED BOOKS

— High School English Grammar and Composition by Wren & Martin

— Objective General English by S.P. Bakshi

1. Parts of Speech
2. Tenses
3. Articles and Prepositions
4. Sentence Structure
5. Vocabulary Building (Synonyms, Antonyms, Idioms)
6. Reading Comprehension
7. Precis Writing
8. Letter Writing

05 Digital Electronics

6 topics · Not specified

RECOMMENDED BOOKS

— Digital Electronics by R.S. Sedha

— Digital Fundamentals by Thomas L. Floyd

1. Number Systems (Decimal, Binary, Octal, Hexadecimal)
2. Conversions between Number Systems
3. Boolean Algebra
4. Logic Gates (AND, OR, NOT, XOR, XNOR)
5. Combinational Circuits (Adders, Subtractors, Multiplexers, Demultiplexers)
6. Sequential Circuits (Flip-Flops, Counters)

5 subject(s), 39 topics listed above. Verify critical details with the official exam notification before applying.