



GUJARAT UNIVERSITY

BCA I SYLLABUS

COURSE TITLE	Introduction to Computer and Emerging Technologies
COURSE CODE	CC-101
COURSE CREDIT	3
Session Per Week	4
Total Teaching Hours	40 HOURS

AIM

The course would make students acquainted with the basics of computers.
To make students aware about current and emerging technologies.

LEARNING OUTCOMES

On the completion of the course students will be able to:

- 1) Know the fundamental terms associated with computers, mobile devices and new technologies.
- 2) Know different types of computers, mobile devices, memory and various input and output devices.
- 3) Understand the basic uses and applications of computer in business and society.
- 4) Get familiar with various computer codes.

DETAIL SYLLABUS

UNIT	TOPIC / SUB TOPIC	TEACHING HOURS
	Introducing Today's Technologies: Computers, Devices, and the Web	10
1	<ul style="list-style-type: none">• Today's Technology• Computers• Mobile and Game Devices• Data and Information• The Web• Digital Security and Privacy• Programs and Apps<ul style="list-style-type: none">o Operating Systemso Applications• Communications and Networks<ul style="list-style-type: none">o Wired and Wireless Communcationso Networks• Technology Uses• Technology Users	5

	<ul style="list-style-type: none"> • Computers and Mobile Devices • Mobile Computers and Desktops • Servers • Terminals • Supercomputers • Cloud Computing • Mobile Devices • Game Devices • Embedded Computers • Ports and Connections 	5
2	Processors, Memory, Adapters and Buses	10
	<ul style="list-style-type: none"> • Inside the case <ul style="list-style-type: none"> o Motherboard • Processors • Memory • Adapters • Buses 	5
	<ul style="list-style-type: none"> • Digital Storage <ul style="list-style-type: none"> o Storage o Hard Drives o Portable Flash Memory Storage o Optical Discs o Enterprise Storage 	5
3	Input and Output Devices	10
	<ul style="list-style-type: none"> • Input Devices <ul style="list-style-type: none"> o Keyboards o Pointing Device o Touch Screens o Pen Input o Motion, Voice, and Video Input o Scanners and Reading Devices 	5
	<ul style="list-style-type: none"> • Output Devices <ul style="list-style-type: none"> o Displays o Printers o Other Output Devices 	5
	Computer Codes	10
	<ul style="list-style-type: none"> • Computer Codes <ul style="list-style-type: none"> o Introduction to Computer Codes o Decimal System o Binary System o Hexadecimal System o Octal System o 4-bit BCD System o 8-bit BCD System o ASCII code o 16-bit Unicode 	3

4	<ul style="list-style-type: none"> • Conversion of Numbers (includes fixed and fractional numbers) <ul style="list-style-type: none"> o Non-Decimal to Decimal o Binary to Decimal o Decimal to Binary o Binary to Octal o Octal to Binary o Octal to Decimal o Decimal to Octal o Binary to Hexadecimal o Hexadecimal to Binary o Hexadecimal to Decimal o Decimal to Hexadecimal o Hexadecimal to Octal o Octal to Hexadecimal 	7
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TEXT BOOK/S:

1. Discovering Computers 2016 (First Edition)
Cengage Learning
By Misty E. Vermaat; Susan L. Sebok; Steven M. Freund; Jennifer T. Campbell; Mark Frydenberg (Shelly Cashman Series)

REFERENCE BOOKS:

Pearson India
By M. Morris R. Mano
2. Fundamentals of Computer (First Edition- 2009) Publisher: McGraw-Hill
by Balaguruswamy
3. Computer Fundamentals (First Edition-2010) Publisher: Pearson
by Anita Goel

WEB RESOURCES:

REQUIRED SOFTWARE/S