



FUNDAMENTALS OF COMPUTERS
FUNDAMENTALS OF COMPUTERS
[CORE COURSE TUTORIAL]

Semester: II

Credits: 4

Subject Code: BB22006

Lectures: 48

Course Outcomes:

At the end of this course the learner will be able to,

- Recall the fundamentals of computing devices and reinforce computer vocabulary, particularly with respect to personal use of computer hardware and software, the Internet, networking and mobile computing
- To analyze the concept of information technology and its role in modern businesses.
- To demonstrate how to organize files and documents on a hard drive.
- To demonstrate application part of Windows and MS. Office.
- To create an understanding regarding cautions to be taken security, safety and security while using NET based service.

Unit 1: Introduction To Computers

14

- Introduction
 - Characteristics of Computers, Advantages and Disadvantages
 - Block diagram of computer, ,
- Types of Programming Languages
 - Machine Languages, Assembly Languages, High Level Languages,
- Data Organization,
 - Drives, Files, Directories,
- Storage Devices,
 - Primary Memory, RAM , ROM,
 - Secondary Storage Devices - FD, CD, HDD, Pen drive
- Types of Software:
 - Application Software and System Software (Meaning and Examples)
- I/O Device-
 - Monitor and types of monitor, Printer and types of printer, Scanners, Digitizers, Plotters
- Types of computers

Unit 2: Introduction to Operating System and Computer Networking

10

- Operating System:
 - Definition, Functions of O.S.,
 - Types of O. S. – Single user O.S., Multiuser O.S., Mobile O.S.
 - Overview of Windows , Android O. S., IOS
- Networking:
 - Definition, Goals, Applications
 - Components
 - Topology, Types of Topology

Board Of Studies	Name	Signature
Chairperson (HoD)	Mrs. Smita Borkar	



- Types of Networks, LAN, MAN, WAN
- Types of Networking Devices and their uses

Unit 3: Microsoft Office**12**

- MS-Word :
- Basic Tools, Formatting
- MS-Excel:
 - Various Functions such as Sum, average, count, max, min,
 - Graph / Charts in Ms Excel
- MS-PowerPoint:
 - Animation Effects, Transition Effects, Slide Show Setting

Unit 4: Introduction to Internet & cyber security and Types of Computing**12**

- WWW, Internet, Internet Service Providers(ISP)
- Services Provided by the Internet:
 - e-mail, search engine, Information security overview – Background and current scenario
- Computing
 - Introduction, Characteristics, Importance
 - Cloud Computing
 - Green Computing
 - Mobile Computing
- Cyber Ethics
 - Concept and Significance
 - The ten commandments of cyber ethics
 - Applied cyber ethics

12 hours for Library work, practical or field work or research purposes

Recommended Text Books:

- Anurag Srivastava, Computer Fundamentals, Thakur Publications, 2019,
- Saha and Saha, Computer Fundamentals , Himalaya Publications, 2012
- C.S.V.Murthy, Fundamentals of Computers , Himalaya Publications, 2017
- Pradeep K. Sinha , Computer fundamentals, BPB Publications New Delhi-2011
- Ms Office E-Book For Beginner With Assignments: Ms.word, Excel & Power Point Full Knowledge's Kindle Edition

Board Of Studies	Name	Signature
Chairperson (HoD)	Mrs. Smita Borkar	

Reference Books:

- Matt Bishop , Introduction to Computer Security, Pearson New Delhi 2019
- G.V. Anjaneyulu , Computer Organization, Himalaya Publishing House Mumbai , 2015
- V. Rajaraman , Fundamentals of Computers, PHI Learning New Delhi , 2015
- Anita Goel, Computer Fundamentals, Pearson, 2010
- Navneet Kumar, Cyber Security: Society, Laws and Ethics -Amazon Asia-Pacific Holdings Private Limited

Websites:

<https://www.tutorialspoint.com/>

<https://www.javatpoint.com/computer-fundamentals-tutorial>

<https://www.ukessays.com/essays/information-technology/introduction-of-cyber-ethics-information-technology-essay.php>

Board Of Studies	Name	Signature
Chairperson (HoD)	Mrs. Smita Borker-	<i>Smita Borker 22/7/20</i>
Faculty	Mrs. Kajal Jaisinghani	<i>Kajal Jaisinghani 22/7/20</i>
Faculty	Mrs. Divya Chitre	<i>Divya Chitre 22/7/20</i>
Subject Expert (Outside SPPU)	Dr. Sagar Jamborkar	<i>Sagar Jamborkar 22/7/20</i>
Subject Expert (Outside SPPU)	Dr. Shankar Mali	<i>Shankar Mali 22/7/20</i>
VC Nominee	Prof Anjum Patel	<i>Anjum Patel 22/7/20</i>
Industry Expert	Mr. Sumit Pal Singh	
Alumni	Ms. Vidhi Thakkar	

Board Of Studies	Name	Signature
Chairperson (HoD)	Mrs. Smita Borkar	<i>Smita Borkar 22/7/20</i>