

JSS College Of Arts, Commerce and Science

PG Department Of Computer Science

OPEN ELECTIVE

Course : COMPUTER FUNDAMENTALS

Credit : 2:0:2

Syllabus

Course Outcomes:

At the end of the course students will be able to:

- CO1. Use technology ethically, safely, securely, and legally.
- CO2. Identify and analyze computer hardware, software, and network components.
- CO3. Design basic business web pages using current HTML/CSS coding standards.
- CO4. Install, configure, and remove software and hardware.
- CO5. Use systems development, word-processing, spreadsheet, and presentation software to solve basic information systems problems.

UNIT 1

INTRODUCTION

Computer, Characteristic of Computer, History of Computer, Components of Computer
Key Factors of Computers: Hardware, Software - types of Software (Application and system), forms of software (firmware, shareware, freeware), Translator - Assembler, Compiler and Interpreters. Computer Application – Business, Scientific, Entertainment and educational.

CLASSIFICATION OF COMPUTERS

Mode of operations – Analog, Digital and hybrid Computers

Size and capabilities – Micro, Mini, Main frame and Super computer

UNIT 2

MEMORY UNITS

Primary memory - RAM, ROM, PROM, EPROM, EEPROM, Flash memory

Secondary memory – Magnetic disk (Hard disk, Zip disk, Jaz disk, Super disk)

Optical disk (CD, CD – R, CD – RW, DVD), Magneto-optical disk device

COMPUTER PERIPHERALS DEVICES AND INTERFACES

Input devices – Working principle of Keyboard and mouse, Functional capabilities of Scanner, Digital Camera, OMR, OCR, touch pad, touch screen. Output Devices – Monitor, Printer, Plotter and projector.

Processors, Classification of Processors on speed, Motherboard, Power Supply, I/O Ports and its Maintenance

PROGRAMMING LANGUAGES

Machine, Assembly language and High Level Language

UNIT 3

Introduction to Windows, Elements of Word Processing, Spread Sheet, Presentations, Nudi/Baraha.

UNIT 4: INTERNET

Basics of Internet: www, HTTP, DNS, IP address, Email, Web browsers, Search Engines

HTML: Introduction to HTML, CSS

E-Commerce: Introduction, Types, Advantages of e-commerce, Applications, survey on popular e-commerce sites

E-governance, Introduction to Cyber Ethics

References:

1. Computer Fundamentals (6th Edition) – Rajaraman.
2. Computer's Today – Suresh K Basandra.
3. Computer Fundamentals-P K Sinha
4. Computer System Architecture (3rd Edition) PHI-2002. Chapters 3.3 & 3.4- Morris Mano,
5. Digital Principles and application (4th Edition) – Malvino Leach, Tata Mc Graw-Hill Edition
6. Computer System Architecture (3rd Edition) – Morris Mano, PHI
7. Microsoft office 365-Katherine Murray.

8. Microsoft office 2016- Nita Rutkosky, Denise Seguin, Audrey Rutkosky Roggenkamp
9. The Complete reference HTML by Herbert Schildt
10. Learn to program HTML and CSS for beginners
11. HTML black book –Steven Holzner.