

# **TUMKUR UNIVERSITY**



## **Syllabus as per CBCS 2016-2017 under Semester Scheme**

**COMPUTER SCIENCE**

**COMPUTER FUNDAMENTALS**

**(BA/BSc/BCom/BBM/BCA/BSW)**

**BSc/BCom/BBM/BCA: I SEM**

**BA/BSW : III SEM**

# **COMPUTER FUNDAMENTALS**

**(BA/BSc/BCom/BBM/BCA/BSW)**

**BSc/BCom/BBM/BCA: I SEM**

**BA/BSW : III SEM**

**2Hrs/week**

**Total: 30 hrs**

## **Unit 1: COMPUTER BASICS**

**5 hrs**

Evolution of computers, characteristics of computer, computer generations: first generation, second generation, third generation, fourth generation and fifth generation computers. Classification of computers: based on working principle, size and capability, computer applications: data processing, commercial, office automation, industry and engineering, healthcare, education, graphics and multimedia applications.

## **Unit 2: COMPUTER ORGNIZATION**

**6 hrs**

Block diagram of computer, computer memory: primary memory: Read Only Memory and Random Access Memory. Secondary memories- hard disk, floppy disk, compact disk, blue ray disk, pen drive, memory cord. Input devices: key board, mouse, OMR, OCR, MICR, BCR and scanner. Output devices: monitor (CRT ,LCD, LED), printers: impact and non impact printers, plotters.

## **Unit 3: NUMBER SYSTEM**

**3 hrs**

Introduction to number systems, positional and non positional number systems. Decimal, binary, octal and hexa decimal number systems and their conversation.

## **Unit 4: COMPUTER HARDWARE AND SOFTWARE**

**5 hrs**

Computer hardware, computer software-types of software: system software, application software, programming languages, low level and high level languages. Program translators: assemblers, compilers, interpreters.

Problem solving techniques: steps in problem solving techniques, algorithm: characteristics, examples, flowchart: flowchart symbols, examples.

**Unit 5: COMPUTER NETWORKS AND INTERNET APPLICATIONS** **3 hrs**

Introduction, Types of Networks, Network Topology. LAN, WAN, MAN, Intranet and Internet, Internet applications, WWW, E-mail, browsing and searching. Search engines. Computer virus antivirus and surfing.

**Unit 6. OPERATING SYSTEM** **2 hrs**

Introduction to OS, functions of OS, different views of OS, type of OS, DOS : internal and external commands.

**Unit 7: MS-OFFICE** **6 hrs**

**MS Word:** Introduction to MS-Word, Editing a document, Formatting a document, Preview document, Printing a document, Find and Replace, Checking the grammar and Spelling , Word count, Header and footer, Auto correct and auto text, Drawing and insert objects, Table generation.

**MS Excel:** Worksheet basic, Creating worksheet, Entering text, Dates, alphanumeric and values, Tool bars and menus, Applying different formulas, Creating charts, Formatting of work sheet.

**MS Power Point:** Need of power point, Creating slides, Entering text, graphics, pictures and other objects, Tool bars and menus, Custom animation, Creating charts, Formatting of presentation.

**Reference Books:**

1. Computer Fundamentals: N. Mithili Devi and E. PadmaSri, SKYWARD Publishers.
2. Introduction to computer concepts: Pearson publication.
3. Computer Fundamentals : Anita Goel, Pearson publication.
4. Fundamentals of Computers, - V. Rajaraman.: PHI (EEE)
5. Microsoft office 2010: John Walkenbach, Herb Tyson, Michael R Groh, Faithe Wempen.
6. Microsoft office 2010 for windows : Steve Schwartz.

**Scheme of evaluation:**

<b>Theory examination</b>	<b>:</b>	<b>50marks</b>
<b>IA marks</b>	<b>:</b>	<b>Nil</b>
<b>Total</b>	<b>:</b>	<b>50 marks</b>