VIJAYANAGARA SRI KRISHNADEVARAYA UNIVERSITY, BALLARI

SYLLABUS
Department of Studies in Computer Science
BACHELOR OF SCIENCE/
BACHLOR OF COMUTER APPLICATION

(III to IV Semester COMPULSORY PAPER)

With effect from 2016-17

3.3	Computer Fundamentals

Teaching : 4 Hrs. / Week(2 Credits)   **Max. Marks : 70**
Total Hours : 50 Hrs   **I. A. Marks : 30**
Code : Paper 3.3   **Univ Code : --**
Contact Hours : 4 hours per week   **Work load : 4 hours per week**
Credit Points : 2

Evaluation: Continues Internal Assessment - 30 marks
Semester and Examination - 70 marks

Unit 1:
Computer Electronics: Number System: Binary, octal, decimal & Hexadecimal number system . Binary arithmetic: Addition, Subtraction-using 1's and 2's complement. Digital Logic:AND,OR,NOT,NAND,NOR,Universal Gates. Boolean algebra:Basic postulates,principle of duality theorems,simplifications of expressions using postulates.
14Hr

Unit 2:
Computing Environmen, Evolution of languages-Machine,Assembly and HLL Translators-Assembler,Compiler,Interpreter,Loader,Linker
8Hrs

Unit 3:
Fundamentles of network :Computer networks, advantages and disadvantages of computer networks. Types of computer network. Data transmission, topologies. **8Hrs**

Unit 4:
Internet Applications and E-commerce. Introduction, some definitions of internet, internet services. Creating E-mail id,E-commerce, advantages and disadvantages of E-commerce. Types of E-commerce.
10Hr

Unit 5:

HTML: Introduction, a html document, markup tags, heading, paragraphs, text formatting, list, inline images, linking Executing html programs.

12Hrs

Reference Books:

1. P.B. Kottur, Computer concepts & C Programming 17th edition.
2. Rajaraman, V.Fundamentals of Computers, 2nd Edition. Prentice Hall India Limited
3. Sanjay Saxena, A first course in Computer, Vikas Publishing.2

Question Paper Pattern:

1. **Theory:** The question paper has three parts.

   Part-I contains 12 questions out of which 10 questions have to be answered. Each question carries 2 marks.

   Part-II contains 5 questions out of which 3 questions have to be answered. Each question carries 5 marks.

   Part-III contains 5 questions out of which 3 questions have to be answered. Each question carries 15 marks.

2. **Practical:** No practical Exam.

4.6	**Computer Applications:**

Teaching : 4 Hrs.   **Max. Marks**   : 70
Total Hours : 50 Hrs   **I. A. Marks**   : 30
Code : Paper 4.6   **Univ Code : --**
Contact Hours : 4 hours per week   **Work load : 4 hours per week**
Credit Points : 2

Evaluation: Continues Internal Assessment   - 30 marks
                     Semester and Examination   - 70 marks

Unit-1:
Introduction to Electronic Commerce: The meaning, benefits, impact, Classification, application of Electronic Commerce technologies. Electronic Commerce Business models: meaning of business model

                                                                              14Hrs

Unit-2:
Electronic Data Interchange: Conventional trading process, meaning of EDI, building blocks of EDI system, layered architecture, value added networks, benefits and application of EDI. Electronic Commerce: Architectural framework, Electronic Commerce: Information distribution and messaging: FTP application, Email, WWW server, HTTP, Web Servers implementation.   **14Hrs**

Unit-3
 Electronic Commerce : Network infrastructure: LAN, Ethernet LAN, WANs, Internet, TCP/IP reference ,model, Domain Name systems, Internet industry structure,Electronic Commerce: securing the business on Internet: Vulnerability of information on Internet, security, policy, procedures and practices, site security, protecting the network 12Hrs

Unit-4
Electronic Commerce: securing the business on Internet,Transaction security, cryptography, digital signature, email security.Electronic Payment System: Introduction to payment system, Online payment system, prepaid electronic,payment systems, requirement metrics of a payment system,Mobile Commerce: Introduction, Framework and models: meaning, benefits, impediments, framework   **10 Hrs**

Reference Books:

1. David Whiteley, E-Commerce: Strategy, Technologies and Applications, Tata McGraw Hill Education
Private limited, 2004
2. Ravi Kalakota, Andrew B. Whinston, Frontiers of Electronic Commerce, Addison-Wesley Publications,
2000
3. C. S. V. Murthy, E-commerce: Concepts, Models, Strategies, Himalaya Publishing House, 2011

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