Paper Code: DCS-102
Paper: Introduction to IT System

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UNIT I:

Basic Internet skills: Understanding browser, efficient use of search engines, awareness about Digital India portals (state and national portals) and college portals.

General understanding of various computer hardware components – CPU, Memory, Display, Keyboard, Mouse, HDD and other Peripheral Devices.

UNIT II:

OS Installation (Linux and MS Windows), Unix Shell and Commands, vi editor.

UNIT III:

HTML4, CSS, making basic personal webpage.

UNIT IV:

Office Tools: OpenOffice Writer, OpenOffice Spreadsheet (Calc), OpenOffice Impress.

UNIT V: Information security best practices.

Class lectures will only introduce the topic or demonstrate the tool, actual learning will take place in the Lab by practicing regularly.

References Books:

1.   R.S. Salaria, Computer Fundamentals, Khanna Publishing House
2.   Ramesh Bangia, PC Software Made Easy – The PC Course Kit, Khanna Publishing House
3.   Online Resources, Linux man pages, Wikipedia
4.   Mastering Linux Shell Scripting: A practical guide to Linux command-line, Bash scripting, and Shell programming, by Mokhtar Ebrahim, Andrew Mallett

Paper Code: MCA-1108
Paper Name: Human Computer Interaction

L	T	P	C
3	0	0	3

UNIT – 1

Introduction: Importance of user Interface – definition, importance of good design. Benefits of good design. A brief history of screen design. The graphical user interface – popularity of graphics, the concept of direct manipulation, graphical system

UNIT - II

Design process – Human interaction with computers, importance of human characteristics human consideration, Human interaction speeds, understanding business junctions. Screen Designing: Design goals – Screen planning and purpose, organizing screen elements, ordering of screen data and content – screen navigation and flow – Visually pleasing composition

UNIT- III

Windows – New and Navigation schemes selection of window, selection of devices based and screenbased controls. Components – text and messages, Icons and increases – Multimedia, colors, uses problems, choosing colors.

UNIT- IV

HCI in the software process, The software life cycle Usability engineering Iterative design and prototyping Design Focus: Prototyping in practice Design rationale Design rules Principles to support usability Standards Golden rules and heuristics HCI patterns Evaluation techniques, Goals of evaluation, Evaluation through expert analysis, Evaluation through user participation

UNIT- V

Cognitive models Goal and task hierarchies Design Focus: GOMS saves money Linguistic models The challenge of display-based systems Physical and device models Cognitive architectures Ubiquitous computing and augmented realities Ubiquitous computing applications research

TEXT BOOKS:

1. The essential guide to user interface design, Wilbert O Galitz, Wiley Dream Tech.
2. Human – Computer Interaction. Alan Dix, Janet Fincay, Gre Goryd, Abowd, Russell Bealg, Pearson Education,
3. Designing the user interface. 3rd Edition Ben Shneidermann, Pearson Education Asia.
4. Interaction Design Prece, Rogers, Sharps. Wiley Dreamtech.
5. User Interface Design, Soren Lauesen , Pearson Education.
6. Human –Computer Interaction, D. R. Olsen, Cengage Learning.
7. Human –Computer Interaction, Smith - Atakan, Cengage Learning.