

MODIFIED SYLLABUS OF INFORMATICS

INFORMATICS

COURSE CODE EN3B1

TITLE OF THE COURSE : INFORMATICS

SEMESTER IN WHICH THE COURSE IS TO BE TAUGHT 3

NO. OF CREDITS 4

NO. OF CONTACT HOURS 72 (4 hrs/wk)

MODULE I: GENERAL INTRODUCTION

Outline history of the development of computers - Types of computers- PC/Workstations – Laptops – Palmtops - Mobile Devices – Notebooks -Mainframes – Supercomputers - Significance of IT and the Internet

MODULE II: INTRODUCTION TO BASIC HARDWARE

Monitor - CRT and LCD – issues - CPU-mouse-keyboard-processor types -Ports - USB 2.0- Input-output devices - Printers-scanners-graphic tablet-thumb drive- modems-digitalcameras-microphones-speakers. Bluetooth devices

[To be deleted from MODULE II:

IEEE Firewire - IDE/SATA connectors]

MODULE III: INTRODUCTION TO SOFTWARE

Topics: Operating Systems - Windows- Windows versions- Linux – Linux distributions- Free software- software licenses - Software Tools (applications) - Windows software tools- Word, PowerPoint, Excel - Linux tools - Open Office - Security issues-viruses- antivirus tools

[To be deleted from MODULE III:

GNU public license- other licenses. Open Source - Source Code FOSS. Installing Windows and Linux -BIOS - Changing boot order. Installing software in Windows and Linux -Drivers for peripherals - Advanced applications - Photoshop, GIMP, Spreadsheets, Database tools in Windows and Linux. Dream weaver etc. Text-to-speech, OCR tools, speech recognition Content Management Systems-Learning Management Systems-Content Authoring tools- Blogs. Assistive technology for the handicapped -JAWS, NVDA. Virtual Reality, Quick Time Virtual Reality-. File encryption- Cryptography. Various file formatsand extensions- (eg: .jpg, .doc, .bmp .avi etc) format reading softwareconvertingbetween formats- proprietary formats- formats that software save files in. Developing Software - Programming Languages- c++ - Visual Basic-Java- python]

MODULE IV: INTRODUCTION TO NETWORKING AND THE INTERNET

What is Networking - LAN- WAN- Wireless networks - Benefits of Networking- file sharing-sharing of printers- examples - networking in an office- in an internet café. The Internet- HTML-websites – blogs -search engines- e-mailchat- social networking- Security issues- Hacking- Phishing.

[To be deleted from MODULE IV:-

Wikis-file sharing – net banking-shopping on internet-booking a rail ticket online-checking telephone directories online- checking electoral rolls at the election commission site- online maps]

MODULE V: KNOWLEDGE RESOURCES ON THE INTERNET

Encyclopedias – libraries - book sites – journals - content repositories – online education - other information sites - internet directories - other information sources - websites of universities and research institutions - Online courses and Virtual Universities

[To be deleted from MODULE V
COIL, TDIL sites. Information Feeds - RSS, Atom]

MODULE VI: COMPUTER LOCALIZATION

What is localization - using computers in the local languages in India -language packs for operating systems and programs - fonts –Unicode - ASCII - keyboard layout issues -- software tools for typing local languages - TDIL project.

[To be deleted from MODULE VI:

Ttf- official layouts–Govt developed tools- Bharateeya Open Office - Using local languages in Linux. CLIK Keralam site]