EM5OPT02 - OPEN COURSE
B. INFORMATION TECHNOLOGY
SEMESTER V

Hours/Week : 4
Contact Hours : 72
Credits : 3

Course outline

Module I Overview of Information Technology (13 hrs)

Features of the modern personal computer and peripherals, computer networks and Internet, wireless technology, cellular wireless networks, introduction to mobile phone technology, introduction to ATM, purchase of technology, License, Guarantee, Warranty, overview of Operating Systems & major application software.

Module II Knowledge Skills for Higher Education (14 hrs) Data, information and knowledge, knowledge management- Internet access methods – Dial-up, DSL, Cable, ISDN, Wi-Fi – Internet as a knowledge repository, academic search techniques, creating cyber presence, case study of academic websites, open access initiatives, open access publishing models. Basic concepts of IPR, copyrights and patents, plagiarism, introduction to use of IT in teaching and learning, case study of educational software, academic services INFLIBNET, NICNET, BRNET

Module III Social Informatics (14 hrs)

IT and Society– issues and concerns – digital divide, IT and development, the free software movement, IT industry**:** new opportunities and new threats, software piracy, cyber ethics, cyber-crime, cyber threats, cyber security, privacy issues, cyber laws, cyber addictions, information overload, health issues– guide lines for proper usage of computers, internet and mobile phones. e-wastes and green computing, impact of IT on language and culture– localization issues– Unicode– IT and regional languages.

Module IV IT Applications (13 hrs)

e-Governance applications at national and state level, IT for national integration, overview of IT application in medicine, healthcare, business, commerce, industry, defense, law, crime detection, publishing, communication, resource management, weather forecasting, education, film and media, IT in service of disabled, futuristic IT– Artificial Intelligence, Virtual Reality, Bio-Computing.

Text Books:

1. *Alan Evans, Kendal Martin et.al.* **Technology in Action**, Pearson Prentice Hall (Third Ed.)

2. *V Rajaraman,* **Introduction to Information Technology**, Prentice Hall
3. *Alexis Leon & Mathews Leon,* **Computers Today***,* Leon Vikas.
4. *Peter Norton,* **Introduction to Computers**, 6e (Indian Adapted Edition)

Additional References

1. Greg Perry, SAMS Teach Yourself Open Office.org, SAMS,
2. Alexis & Mathews Leon, **Fundamentals of InformationTechnology**, Leon Vikas
3. George Beckman, Eugene Rathswohl, **Computer Confluence**, Pearson Education
4. Barbara Wilson, **Information Technology: The Basics**, Thomson Learning
5. John Ray, 10 Minute Guide to Linux, PHI, ISBN 81-203-1549-9
6. Ramesh Bangia, **Learning Computer Fundamentals**, Khanna Book Publishers

Web Resources:

1. www.fgcu.edu/support/office2000
2. www.openoffice.org*Open Office Official web site*
3. www.microsoft.com/office*MS Office web site*
4. www.lgta.org*Office on-line lessons*
5. www.iearnthenet.com*Web Primer*
6. www.computer.org/history/timeline
7. www.computerhistory.org
8. http://computer.howstuffworks.com
9. www.keralaitmission.org
10. www.technopark.org
11. http://ezinearticles.com/?Understanding-The-Operation-Of-Mobile-Phone-Networks&id=68259
12. http://www.scribd.com/doc!259538/All-about-mobile-phones
13. http://uww.studentworkzone.com/question.php?ID=96
14. http://www.oftc.usyd.edu.au/edweb/revolution/history/