

Semester I

106: Tools and Techniques in Geoinformatics

Unit 1: Operating Systems

20 Lectures

- 1.1 Working with Windows Desktop and utilities a) Notepad b) Wordpad c) Paint d) Taskbar e) adjusting display resolution f) Using the browsers
- 1.2 **Installing and connecting various Devices**– Printers, scanners, Ethernet, Blue tooth, wireless, mobile, modem, projector
- 1.3 Linux commands: **Working with Directories:**
 - a) pwd, cd, absolute and relative paths, ls, mkdir, rmdir
 - b) file, touch, rm, cp, Mv, rename, head, tail, cat, tac, more, less, strings, chmod
1. 4 Linux commands:**Working with files:**
 - a) ps, top, kill, pkill, bg, fg
 - b) grep, locate, find, locate
 - c) date, cal, uptime, w, whoami, finger, uname, man, df, du, free, whereis, which
 - d) Compression: tar, gzip

Unit 2: Internet and Web Designing and office Tools:

20 Lectures

- 2.1 Use of Indian Geo-portals: Bhuvan, Mosdaik, Vedas
- 2.2 (a) Use of Basic HTML Tags
(b) Design a webpage using different text formatting tags.
- 2.3 (a) Design a webpage with links to different pages and allow navigation between webpages.
(b)Design a webpage demonstrating all Style sheet type
- 2.4 (a) Create a word document such as resume, a research paper using a word processor.
(b) Working with spreadsheets, applying formulae
(c) Working with Presentation tools

Unit 3: Introduction to Programming:

20 Lectures

- 3.1 Basic Python programs
- 3.2 Use of control statements
- 3.3 Implementing sequences
- 3.4 Working with sequences

References:

1. HTML5 Black Book: Covers CSS3, JAVASCRIPT, XML,XHTML, AJAX, PHP and JQUERY DreamTech Press.
2. Paul Gries, Jennifer Campbell, Jason Montojo, Practical Programming: An Introduction to Computer Science Using Python 3, Pragmatic Bookshelf, 2/E 2014
3. Michael Dawson, Python Programming for the Absolute Beginner, Paperback, Second Edition, Published November 8th, 2005 by Course Technology PTR
4. Randy, Microsoft Office 2016: In Practice 1st Edition, Nordell professor of Business Technology.