



ECDL® Syllabus Five

ECDL Module One

Concepts of IT

Windows Vista & Microsoft Office 2007 Edition

HARDWARE

- Hardware
- What is a personal computer?
- Apple computers
- Laptop & palmtop computers
- Features of handheld portable digital devices
- Personal Digital Assistant (PDA)
- Mobile phones (cell phones)
- Media players
- Smartphones
- Parts of a computer
- The CPU
- Memory (RAM)
- ROM-BIOS
- Disks
- The Hard (Fixed) Disk

INPUT/OUTPUT PORTS

- Universal Serial Bus (USB) Port
- Serial Port
- Parallel Port
- Network Port
- FireWire Port

COMPUTER PERFORMANCE

- Factors affecting computer performance
- CPU Clock speed
- RAM size
- Hard disk speed and storage
- Free hard disk space
- De-fragmenting files
- Multitasking considerations
- CPU speeds

MEMORY AND STORAGE

- What is computer memory?
- RAM
- ROM
- ROM-BIOS
- Video (graphics) memory
- Measurement of storage capacity
- Types of storage media
- Internal hard disks
- External hard disks
- CDs
- DVDs
- Recordable CD & DVD drives
- USB flash drives (memory sticks)
- Memory cards
- Network drives and on-line file storage
- Floppy disks (diskettes)

INPUT DEVICES

- Input devices.
- Keyboard
- Mouse
- Scanners
- Tracker balls
- Touch pads
- Joysticks
- Web cams
- Digital cameras
- Microphones

OUTPUT DEVICES

- Output devices
- Traditional computer monitor
- Flat screen computer screens
- Projection devices
- Speakers and headphones
- Speech synthesizers
- Printers
- Different types of printer
- Laser printers
- Colour laser printers
- Inkjet printers
- Dot Matrix printers

INPUT AND OUTPUT DEVICES

SOFTWARE CONCEPTS

- What is software?
- What is an operating system?
- Examples of software applications
- Word processing applications
- Spreadsheets applications
- Database applications
- Presentation applications
- E-mailing applications
- Web browsing applications
- Photo editing applications
- Computer games
- Difference between the operating system and application programs
- Accessibility options
- Voice recognition software
- Screen reader software
- Screen magnifier software
- On-screen keyboard

NETWORK TYPES

- LAN (Local Area Network)
- WLAN (Wireless Local Area Network)
- WAN (Wide Area Network)

- Client/server networks
- Internet
- World Wide Web (WWW) vs. the Internet
- Intranets
- Extranets

DATA TRANSFER

- Downloading from & uploading to a network
- Data transfer rate measurement
- Broadband vs. dial-up Internet connection services
- Internet connection options
- Features of a broadband Internet connection

ICT IN EVERYDAY LIFE

ELECTRONIC WORLD

- What does 'Information and Communication Technology' (ICT) mean?
- Internet services for consumers
- E-commerce
- E-commerce
- Advantages of e-commerce
- Disadvantages of e-commerce
- E-banking
- E-government
- E-learning
- Uses of computer applications in education
- Teleworking
- Some of the advantages of tele-working
- Some of the disadvantages of tele-working

COMMUNICATION

- Electronic mail (e-mail)
- Instant messaging (IM)
- Voice over Internet Protocol (VoIP)
- Really Simple Syndication (RSS) feeds
- Blogging (web logs)
- Podcasts

VIRTUAL COMMUNITIES

- Online (virtual) communities
- Social networking websites
- Internet forums (message boards / discussion boards)
- Chat rooms
- Online computer games
- Publishing and sharing content online.
- Sharing photos, video and audio clips.
- Precautions when accessing online communities

HEALTH

- What is ergonomics?
- Repetitive Strain Injury (RSI)

- Lighting issues when using a computer
- Screen and keyboard positioning
- Seating issues when using a computer
- Wellbeing when using a computer
- Make sure that cables are safely secured
- Make sure that power points are not overloaded

ENVIRONMENT

- Computer recycling options
- Computer energy saving options

SECURITY

IDENTITY/AUTHENTICATION

- Computer logon user name (ID) and password.
- Password policies

DATA SECURITY

- Off-site backups
- Why do you need to back up your computer?
- Organising your computer for more efficient backups
- Complete vs. incremental backups
- What is a firewall?
- Data theft issues

VIRUSES

- Computer viruses
- Computer virus infection issues
- Protecting against computer virus infection
- What to do if you discover a virus on your computer
- The limitations of anti virus software

LEGAL ISSUES

COPYRIGHT

- What is copyright?
- Copyright issues when copying files

SITE LICENSES

- Checking software licence status
- What is an 'end-user license agreement'?
- Examining the 'end-user license agreement' within Office 2007 software
- Types of licence agreement
- What is shareware?
- What is freeware?
- Open source software

DATA PROTECTION

- Data Protection and Privacy Issues
- Data Protection Legislation

ABBREVIATIONS & TERMINOLOGY