

NED UNIVERSITY OF ENGINEERING & TECHNOLOGY, KARACHI
FIRST YEAR (COMPUTER SCIENCE AND INFORMATION TECHNOLOGY)
ANNUAL EXAMINATION 2008
BATCH 2007-08

Time: 3 Hours

Dated: 29-10-2008
Max. Marks: 75/80

FUNDAMENTALS OF INFORMATION TECHNOLOGY
(CT-158)

Instructions: 1. Attempt any FIVE questions.

- Q. 1) (a) Describe the processor and memory (4)
(b) Describe primary and secondary storage devices (3)
(c) Discuss D-RAM and S-RAM (2)
(d) Describe the different parts of a CPU (3)
(e) Describe the standard keyboard layout (3)
- Q. 2) (a) What is Flash memory? (2)
(b) Define L1 Cache & L2 Cache (3)
(c) Describe variants of the mouse (3)
(d) Why do computers need ROM? (3)
(e) What is a network topology? Describe the different network topologies, giving advantages and disadvantages of each. (4)
- Q. 3) (a) Briefly describe the two main buses in a computer (3)
(b) What are the benefits of networking? (3)
(c) Briefly describe different types of printers (3)
(d) Describe a client server and peer to peer network (2)
(e) Describe shielded twisted pair cable, unshielded twisted pair cable, coaxial cable and fiber optic cable. (4)
- Q. 4) (a) Describe what a bit, byte and ASCII is (5)
(b) Describe how a CD-ROM reads data from a compact disk (5)
(c) Describe the machine cycle and different types of memory (5)
- Q. 5) (a) Describe CRT monitors and Flat Panel Display monitors. (8)
(b) Convert the following: (7)
(i) 235 Decimal to Binary
(ii) $(10111)_2$ Binary to Decimal
(iii) 121.361 Decimal Point to Binary
(iv) $(1010.0011)_2$ Binary Point to Decimal
(v) 001101100111 Binary code decimal to Decimal

- Q. 6) (a) What is a Graphical User Interface (GUI)? (2)
(b) Discuss menus, Dialog Boxes and Command-Line Interfaces. (6)
(c) Discuss multitasking. How does the operating system manage hardware? (7)

Q. 7) Discuss the following:

Unix, DOS, Macintosh operating system, Windows 3.x, OS/2 WARP, Windows NT, Windows NT Workstation, Windows NT Server, Windows 95 and 98, Linux, Windows 2000 (15)

- Q. 8) (a) Discuss Magnetic Storage Devices (2)
(b) Discuss Optical and Audiovisual Input devices (2)
(c) Discuss Wireless communications and Wide Area Networks. (4)
(d) What are the different components of a computer system? (4)
(e) Convert the following Decimal Point into Binary: 121.361 (3)