



**Computer Fundamentals – Summer
Midterm Examination**

Time Allowed: 2hrs

Max Marks: 70

DIRECTIONS:

1. Solve on the question paper. No additional papers are required.
2. Sharing of calculators, rulers, writing material not allowed.

1) What is RSI? How can it be avoided? (3)

Repetitive strain injury (RSI). It can be avoided by changing position and moving around time to time for computer work.

2) What is the difference between track point and touch pad? (2)

Track point is a joystick pad that is used to move cursor and pointers by forcing in the desired direction.
- Touch pad uses movement of fingers over its flat surface

3) What functionalities are provided by a computer mouse, write 5 of them? (2.5)

- Drag/ Drop
- Move on screen
- Point something
- Right click to many features
- Scroll menus and files
- Open and close files/folders

4) Amongst Keyboard, Bar code reader and Touch screen, which one uses database for numbers and why? (2.5)

Bar Code Reader



5) What are the (3) categories of video output device based on color? (1.5)

- B/W/mono - RGB Colored,
- Grey Scale

6) Why online server is preferred for e-mail reception over offline clients? (2)

Email won't be discarded by both
receptor and mail server are online by
if receptor is offline, still mail server will handle it etc

7) What is the difference between web server and FTP server? (4)

- Web server gives services of accessing sites and
searches information for us.
- FTP server gives directly the whole files are looking for

8) What is the difference between Peer to Peer (P2P) and server based centralized data communication services? (2)

Peer2peer is between two devices of same technology
centralized can have 1 upto n-clients and of
various technologies.

9) Why URL is preferred over IP address for a web server? (2)

URL is memorable and IP is a number



10) What will be the size of an LCD its length is 10" and a height of 12.5"? (4)

Approx 16"

11) Amongst Active Matrix display, Passive matrix display and Cathode Ray tube, which one has crisps graphics? (1)

Active Matrix Display

12) How many LED lights are present in a pixel to form a color? (1)

4 (R, G, B, white)

13) What is the difference between headphone and headset? (1)

headset can record sound / input device,
headphon is only output.

14) What is CMYK and DPI? How it affects the performance of a printer? (4)

Cyan, Magenta, Yellow, Key (Black) is a pigment
combination used by printing machines
DPI is dot per inch used by Scanners and
screens to display picture.
Both affects the resolution of printer output



15) Why is thermal wax printer faster than ink-jet printer? (2)

Thermal wax printer is slower than ink jet printer -

16) The speed of a printer is 90ppm. How many pages can be printed by this printer in 20 seconds? (2)

30 pages

17) What is the main difference between ASCII and Extended ASCII? (2)

American Standard Code for information interchange is coded characters b/w 0 - 127 whereas its extended version has symbols and some images 128-255

18) Amongst CU and ALU, which one is used for calling instruction set code? (2)

CU takes care of instruction set calls.

19) What is machine cycle? How it differs from the internal crystal clock of the CPU? (4)

Fetch, Decode, Execute and Store collectively is termed as M.C.

Internal clock can take many repetitions before completing 1 MC



20) What is non-volatile memory? Write down the type of memory to each term given in the table below. (1+0.5x6)

Memory that resides after turning off power

Memory Module	Type
EEPROM	NV (non-volatile)
ROM	NV
RAM	V (volatile)
BIOS Controller	NV
L1 Cache	V
Flash Drive	NV

21) What is the maximum number of USB Devices that can be connected to a mainboard? (0.5)

127

22) What is virtual RAM? Why is virtual RAM slower than normal RAM? (4)

Emulated RAM on Hard-drive or SSD is termed as V. RAM. it is thus slower than normal RAM.

23) What is Reduced Instruction Set Computing? Give a practical example to support your answer. (5)

Unlike a micro-processor, a RISC uses less functionality to do a specific task. It is modified computer eg. Calculator, Microcontroller, AC chip.



24) What is a device driver? Why is it omitted in plug n play device? (4)

Device Driver is a library used by the PC/other computer to know and operate a connected device. Plug n play devices install device driver on its own.

25) The stream 000100010100101010111101100... is fed to an 8bit UART which saves it to registers R1, R2 and R3 respectively. Write down the contents of R1, R2 and R3. (6)

Register	Data
R1	00010001
R2	01001010
R3	1011101

26) A 32bit processor can process a total of 1GB data at a clock speed of 3.6GHz in 0.2seconds. If the installed processor is upgraded to 64bit technology, what will be the process time? (2)

$$\frac{0.2}{2} = 0.1s + \text{initialization time.}$$

THE END

UNIVERSITY OF ENGINEERING & TECHNOLOGY, PESHAWAR
(MARDAN CAMPUS)

Attendance Sheet

Mid Term Examination Summer, 2017 Semester

(Electrical Engineering Power & Communication)

Date: 3.8.2017

Time: 8:30 — 10:30

Paper: Computer Fundamentals

Hall #: 1 (Electrical Deptt.)

S. No	Exam No	Name of Candidate	Sheet Number	Signature	
1	13MDELE0122	Muhammad Muzammil		Signature	15
2	13DMELE0163	Ahmad Farukh		Signature	24
3	15MDELE0315	Khalil Ahmad		Signature	21.5
4	14MDELE0222	Muhammad Junaid		Signature	12.5
5	16MDELE0379	Hassan Waseem Khan		Signature	27
6	16MDELE0350	Abdur Rasool		Signature	29
7	16MDELE0394	Muhammad Fahad Naveed		Signature	39
8	16MDELE0404	Shah Faisal Khan		Signature	22.5
9	16MDELE0418	Aizaz Ali		Signature	05
10	16MDELE0393	Awais Fakhar		Signature	14.5
11	16MDELE0399	Fahad Waqar		Signature	20
12	16MDELE0417	Omer Naveed		Signature	11
13	16MDELE0408	Muhammad Haroon		Signature	21
14	16MDELE0415	Asif Khan Wazir		Signature	8.5
15	16MDELE0376	Mashal Khan		Signature	12.5
16	16MDELE0413	Sohaib Alam		Signature	03.5
17	16MDELE0369	Usman Zeb		Signature	29.5
18	16MDELE0377	Umar Nouman		Signature	30.5
19	13MDELE0175	sulaiman khan	Absent	Signature	

20. 16MDELE0419 IDREES

No of Present Students: 20 No of Absent Students: 01

Total Number of Students: 21

Superintendent Name & Signature: Shazica Habib

15 16MDELE0408 Muhammad Haroon

21 ————— 420 Asif shah

Signature
3/8/2017
45.5