

Dear Parents / Students

Due to the unprecedented situation, Knowledgeplus Training center is mobilized and will keep accompanying and supporting our students through this difficult time.

Our Staff will be continuously, **sending notes and exercises on a weekly basis** through **what's app and emails**. Students are requested to **copy the notes and do the exercises** on their copybooks.

The answers to the questions below will be made available on our website on [knowledgeplus.mu/support.php](https://knowledgeplus.mu/support.php)

Please note that these are extra work and notes that we are providing our students and **all classes will be replaced during the winter vacation.**

We thank you for your trust and are convinced that, together, we will overcome these troubled times

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## Advanced Computing – Week 3

### Security issues on the internet

The security aspects of using the internet is important because we have control in what we are using on the net so as not to fall into the trap of viruses.

The internet also remains a powerful tools to gather information and learn things. The internet also enables us to communicate with friends through Skype to far way relatives . Because the Internet is so easily accessible to anyone, it can be a dangerous place. Know who you're dealing with or what you're getting into. Predators, cyber criminals, bullies, and corrupt businesses will try to take advantage of the unwary visitor.

- **Virus**

A virus is a tiny program which replicates itself over the computer system. It has a mischievous intention to do harm to the computer system. In a virus, we have to parts:

1. Infector
2. Detonator

Viruses are malicious programs that spread throughout computer files without user knowledge. Most widespread virus infections spread through email message attachments that activate when opened. The vicious cycle of a virus perpetuates as infected emails are forwarded to multiple users. Viruses also spread through shared media, such as Universal Serial Bus (USB) drives.

### **Symptoms that we can notice with an infected computer:**

- a. Slows down
- b. Runs short of memory
- c. Files can be corrupted or deleted
- d. Computer shut down intermediately

### **In order to remove viruses, we need to take actions:**

- i. Install regularly updated anti viruses
- ii. Do not buy pirated versions of software, buy originals
- iii. On internet, visit secured sites

- **Adware**

Adware is a software program that display advertisements on your computer. Adware is usually distributed with download software. Most often, adware is displayed in a popup window. Adware popup windows are sometimes difficult to control; they open new windows faster than users can close them. Adware and spyware are usually installed on a computer without the user's knowledge. These programs collect information stored on the computer, change the computer configuration or open extra windows on the computer without the user's content.

- **Malware**

Malware is a file or program other than a virus that is potentially harmful. Many malware attacks are phishing attacks, which try to persuade the user to unknowingly give attackers access to personal information. As you fill out an online form, the data is sent to the attacker. Malware can be removed using spyware and adware removal tools.

## **Theory Questions**

### **Q1. Indicate whether the following statements are True or False**

- a) Software can work without hardware and vice versa.
- b) RSI affect the neck and shoulders.
- c) Computers cannot understand human languages.
- d) The operating system is the most common application software.
- e) We should not turn on our computer during thunderstorm and lighting.
- f) You should always have drinks near the computer.
- g) Softcopy is information printed on paper.
- h) Spreadsheet is an application software.

**Q2.**

- a) Differentiate between software and hardware.
- b) Differentiate between application software and system software.
- c) Give an example of :
  - i. Application Software
  - ii. System software.

**Q3. Tick where appropriate in the following table.**

	Hardware	Software
Joystick		
Ms Paint		
Antivirus		
Monitor		
Ms Excel		
Printer		
Scanner		
Processor		
Word Processor		
Internet Explorer		

**Q4.**

- a) What does “bit” stand for? Explain briefly what is a bit?
- b) What is a “Byte”? Explain briefly why a byte is more informative than a bit.
- c) How many bytes are there in a kilobyte?

**Q5.**

- a) Give one advantage and one disadvantage of using touch screen devices.
- b) Suggest two advantages of using a digital camera over traditional film camera.

**Q6. Match column A and Column B, and write the correct answer in column C. One has already been done as example for you.**

Column A		Column B		Column C
<b>A</b>	<b>Keyboard</b>	1	A small group of bits treated as a unit	<b>A-3</b>
B	Digital Camera	2	A device used for playing games on the computer	
C	Byte	<b>3</b>	<b>Enter text</b>	
D	Program	4	Is used to capture images in a digital format	
E	Joystick	5	A solid state electronic flash memory data storage device.	
F	Flash Memory	6	A set of instruction to do job or task	