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**

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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Proficiency of Software package – Week 3

Implementation Method

Implementation can be defined as putting (a decision, plan, agreement, etc) into effect. Systems implementation is the delivery of that system into production (that is, the day-to-day business or organization operation). It is important you understand this topic isn't about building or programming a system, but rather making the system live. We use the word implementation differently here than we use it when we discuss the design process.

Four common methods to implement a system

1. **Parallel**

   When the new system is used at the same time as the old system the two systems are said to be running in parallel.

Advantages

- Users can compare the output of the old system with the output of the new system , to ensure correctness.
- There is little of data loss because the known-good system is running.

Disadvantages

- Users must take more time to enter data into two different systems.
- Data could be different in two different systems if there is intensive data entry.

Example:

A medical system that tracks patient heart rates is being replaced. A new system is attached while the old system is still working .The two systems are used in parallel to ensure the new system.

2. **Phased**

   When small parts of the new system gradually replace small parts of the old system the implementation method is said to be phased.

Advantages

- Training can be completed in small parts
- A failure of the new system has minimal impact because it is only one small part.
- Issues around scale can be addressed without major impact.

Disadvantages

- This implementation method takes more time to get the new system fully online than other methods.
- There is a possibility of data loss if part of the new system fails.

Example:

A school has a new system to manage student athletics. The old system is paper and pencil. Slowly, over time, a new system is introduced to manage students, their teams, seasons and their coaches. At first, a new system simply manages teams. Then the new system manages seasons (and school years), slowly, the new system is increased to manage coaches players and finally events. At the end of implementation, the new system is managing everything related to student athletics and the old paper and pencil system isn't being used any longer.

3. **Pilot**

   When a small group of users within an organization uses a new system prior to wider use, the system is said to be piloted.

Advantages:

- Training can be supported by pilot group.
- Failure or problem can be identified and addressed without wide-spread impact to the organization.

Disadvantages:

- In a pilot, issues of scales can cause problems. For example, the system might work well for 10 users, but not for 1000.

Example:

A bakery is implementing a new system for customers to order online. They choose 50 customers and ask them to try the new system, and provide feedback. The bakery can then identify issues and address them prior to implementing systems for thousands of users.

4. **Direct**

   When a new system is implemented without any phased or pilot implementation, it is said to be direct. The old system is retired and the new system goes live.

Advantage

- If the system is not critical, this can be a good method for implementation.

Disadvantage

- If you are not sure the system will work, this method of implementation may not be a good idea.

Example:

A store is implementing a new electronic system for employees to leave suggestions for improvement. There is no existing system. The store uses direct method because they are very sure the new system will work, there is a low cost if the system fails, and the store wants to make a “big splash” with the new system.

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**
A	**Keyboard**	1	A small group of bits treated as a unit	**A-3**
B	Digital Camera	2	A device used for playing games on the computer	
C	Byte	**3**	**Enter text**	
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	