SPECIAL PROGRAM IN TECHNICAL VOCATIONAL EDUCATION (SPTVE)
COMPUTER SYSTEMS SERVICING 10 Q3-W4

I. Topic: DATA PROTECTION

II. Objectives:
1. understand data protection and data backup;
2. differentiate data protection and data backup and;
3. practice caution in protecting and backing-up a data.

III. Brief Introduction

Data protection is a security function and is one of the first steps of troubleshooting. Computer data must first be protected before starting any work on a client or customer's computer. A technician can be blamed or held liable if data loss occurs because of improper data handling.

Backup is a functional operation producing a copy of data on a computer or hard drive that is saved to an external media such as a DVD, CD, or flash drive. In an organization, back-ups are routinely done—may it be daily, weekly, or on a monthly basis. This is to ensure that the organization's data are protected and are readily available.

IV. Activities

Activity 1

Directions: Read each sentence carefully and identify the word from the word box that best describe to a data backup. Write the answer on the space provided between each number.

_____ 1. Involves storing data on hardware in a remote physical location, which can be accessed from any device via the internet such as Google Drive.

_____ 2. Also known as removable hard drives connected outside the computer through a USB cable.

_____ 3. Burning data to a disk is now a much less popular, although still a reliable method of data backup.

_____ 4. A tiny solid-state drives that you can carry in your pocket.

_____ 5. A server that's dedicated to saving data.

WORD BOX	CLOUD STORAGE	EXTERNAL HDD	COMPACT DISK
	FLASH DRIVE	NETWORK DRIVE	FLOPPY DISK

Activity 2

Directions: Find and encircle to complete the keyword search puzzle related to data protection.

```
R  E  K  C  A  H  Y  V  S  D  O  O
G  R  N  S  W  X  M  Q  P  E  M  W
N  E  Q  O  V  Y  R  R  Y  T  A  K
I  S  O  E  I  D  R  Z  W  E  L  R
H  T  A  D  R  T  S  G  A  L  W  T
S  R  Q  A  U  A  P  O  R  E  A  A
I  I  A  T  S  V  W  Y  E  D  R  J
H  C  G  A  T  F  U  D  R  I  E  Y
P  T  Q  G  L  H  C  B  A  C  G  U
T  P  R  O  T  E  C  T  I  O  N  Q
I  D  E  T  P  U  R  R  O  C  X  E
D  R  O  W  S  S  A  P  I  H  O  J
```

Key word	☺	☹
Hacker		
Encryption		
Virus		
Malware		
Spyware		
Adware		
Data		
Protection		
Corrupted		
Deleted		
Password		
Restrict		

Source: https://www.tes.com/teaching-resource/data-security-11117399

Activity 3

Directions: Read each sentence carefully and select a letter that best describe to it. Write the answer on the space provided before the number.

____ 1. Copying of data on a computer or hard drive that is saved to an external media such as a DVD, CD, or flash drive.
   a. Protection
   b. Backup
   c. Saving
   d. d. Recovery

____ 2. Computer data must first be protected before starting any work on a client or customer's computer.
   a. Protection
   b. Backup
   c. Saving
   d. d. Recovery

____ 3. Restricted area to the computer room server.
   a. Physical security
   b. Software security
   c. Software privacy
   d. Digital certificate

Centennial Ave., Brgy. Tunasan, Muntinlupa City
Telephone No: 805-9935 / 805-9938
www.depedmuntinlupa.iedu.ph; sdo.muntinlupa@gmail.com

ISO 9001: 2015
Certified No: 18.1519.026

_____ 4. Maintenance of the accuracy and consistency of the data.
   a. Recovery
   b. Integrity
   c. Backup
   d. Saving
_____ 5. Can be blamed or held liable if data loss occurs because of improper data handling.
   a. Technician
   b. Programmer
   c. Systems Analyst
   d. Network Administrator

Activity 4

Directions: Determine whether the statement below implies a **data protection (DP)** or a **data backup (DB)**. Write DP or DB as the answer on the space provided.

_____1.   Used of Flash drive
_____2.   Storing on an External drive
_____3.   Printing the file
_____4.   Burning data on a disc
_____5.   Use of cloud storage
_____6.   Keeping data with a floppy disk
_____7.   Saving data on a network drive
_____8.   Enable firewall
_____9.   Install antivirus and anti-spyware software
_____10. Password protect your software and lock your device
_____11. Encrypt your data
_____12. Keep up with system and software security updates
_____13. Disable file and media sharing if you don't need it.
_____14. Cloning a Full Disk Image
_____15. Used of social media or email

V.   Assessment:

Directions: Read each sentence carefully and match Column A with Column B. Write the answer on the space provided.

COLUMN A	COLUMN B
_____ 1. Basically, the process of keeping certain information private. It involves the use of various methods to make sure that data is kept confidential and safe.	A. Data security
_____ 2. When data is processed it is usually changed in some way or another and integrity describes the correctness of this change.	B. Data integrity
	C. Safeguards

Centennial Ave., Brgy. Tunasan, Muntinlupa City
Telephone No: 805-9935 / 805-9938
www.depedmuntinlupa.iedu.ph; sdo.muntinlupa@gmail.com

ISO 9001: 2015 Certified No: 18.1519.026

_____ 3. Are needed to make sure that the data has integrity by detecting any mistakes or malicious change to the data.

_____ 4. A copy of computer data taken and stored elsewhere so that it may be used to restore the original after a data loss event.

_____ 5. The most obvious choice of protecting data is to keep it in a safe locked room/building safeguarded by a lock-and-key, ID card scanning, biometrics, or alarm systems.

_____ 6. Security measures which can protect data by running a program, the most common approaches used now a days.

_____ 7. Makes data in a computer system illegible and makes data look meaningless.

_____ 8. A key is needed before the data can be changed back to its original form.

_____ 9. Encrypted data used to show that the data being sent or read is genuine. If the recipient of the data can correctly decrypt the digital signature then the data should be correct.

_____ 10. This is an encrypted message which confirms that the person is who they say they are and includes a digital signature.

D. Data backup

E. Software Registration

F. Physical security

G. Software security

H. Encryption

I. Decryption

J. Digital signature

K. Digital certificate

VI. Reflections:

1. What will you do if you unintentionally deleted an important data file?
2. Can you give at least 5 examples of a data storage device?

References:
1. CHS 10 module
2. www.tesda.gov.ph
3. http://en.wikipedia.org
4. www.techsoup.org
5. www.howstuffworks.com
6. www.microsoft.com/technet/network

Writer: <u>Jacinto Tabios</u>   Validator: <u>Gregorio S. Quineri</u>

Centennial Ave., Brgy. Tunasan, Muntinlupa City
Telephone No: 805-9935 / 805-9938
www.depedmuntinlupa.iedu.ph; sdo.muntinlupa@gmail.com

ISO 9001: 2015
Certified No: 18.1519.026