# **Lecture 2 – IT**

#### > Introduction

Write the noun form of the following words:

Employ	
Recover	
Warned	
Attack	
Weak	

Have you heard about any famous cyber-attacks?

## > Reading Comprehension

# Report on a cyber-attack on Ireland's health service

Ransomware locked staff out of their computer systems and "severely" disrupted healthcare in the country. The report added that the attack had "a greater" <u>impact</u> than <u>initially</u> expected.

The report by *PricewaterhouseCoopers (PWC)* found that systems remain exposed to more serious attacks in the future. In addition, cybersecurity experts found that the Irish technology systems were "weak" and there are not enough opportunities to spot warning signs.

The malware was sent to the Irish Health Service Executive by e-mail.

The attackers <u>demanded</u> <u>payment</u> to restore access to the computer systems, and it took the service four months to fully <u>recover</u>.

More than 80% of IT systems were affected, with the loss of key patient information, resulting in severe impacts on the health service.

The Irish Health Service Executive employs about 130,000 people to provide health and social care to five million Irish citizens. Due to the attack, all computer systems were switched off. Doctors, nurses and other workers lost access to systems of patient information, clinical care and laboratories. E-mails went down, and staff had to turn to pen and paper. Thousands of people's healthcare was disrupted. Confidential medical files were also stolen, with hackers threatening to release the data.

On 20 May, the attackers, for reasons not very clear, posted a link to a key that would decrypt files. This allowed a long recovery to begin.

"Without the decryption key, it is unknown whether systems could have been recovered fully, or how long it would have taken to recover systems from back-ups, but it is likely that the recovery timeframe would have been longer," the report says. It took until late September for all the computer servers to be back online.

The report concluded that "great change" was required in technology and cyber-security to protect from future incidents and warned that other organizations needed to learn the lessons of this case.

#### > Technical terms

**Malware:** short for malicious software; it refers to software that is specifically designed to disrupt, damage, or gain unauthorized access to a computer system or a network.

**Ransomware:** malware that lockdowns networks and locks out users until a ransom is paid. It targets some of the biggest organizations in the world.

**Decrypt:** change coded information so it can be understood; to decode.

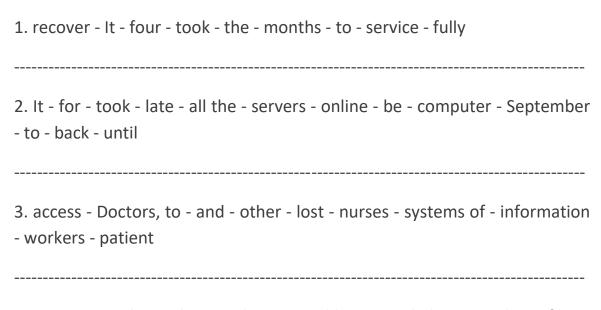
**Cyber-security:** the use of technologies, processes, and controls to protect systems, networks, programs, devices and data against cyber-attacks.

### **Questions:**

### A- Synonyms match:

1- impact	a. at the beginning
2- demanded	b. decode
3- recover	c. <del>get</del> back
4- initially	d. effect
5- decrypt	e. serious/tough
6- payment	f. required/asked for
8- severe	h. money

## **B-** Re-arrange the following sentences:



4. 20 May, - a key - the attackers - would - On - a link — to - that - files - posted - decrypt



## **Examples of written dialogues between IT technicians**

First technician: What's the problem with your computer?

Second technician: It suddenly stopped working

First technician: I think you should restart it.

Second technician: I will try this. It works now, thank you.

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First technician: Seems like you have a problem, what happened?

**Second technician:** I think there is a problem with the application; it doesn't respond.

First technician: This might be an outdated version. You can try updating it.

**Second technician:** Ok, I will do this. Thanks for the advice.

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**First technician:** We're facing a problem with the system; it has been working very slowly since last week.

**Second technician:** This must be a cyber-attack.

**First technician:** What can we do to solve this problem?

**Second technician:** I will consult the IT unit and get back to you.