## UNIT 1: APPROACHING TO IT

**Task 6:** **Write a brief description (100-120 words) about your IT major basing on suggested questions**

Today, I’m going to write about my IT major. Currently, I'm a sophomore at Hanoi University of Industry. My major is Software Engineering. It is a major that programming software, computer languages and network. After graduation, I can become a tester, software engineer, application developer or network administrator. So, I want to be a software engineer after graduation. A software engineer is a person who designs, develops, maintains, test and evaluates computer software. I really like my major because it helps me to access modern technology and make products that meet social needs. I will try my best to do that and make my dreams come true. That’s all.

**UNIT 2:**

I have a laptop which is the gift from my parents on my 18th birthday. It’s manufactured by HP, one of the brand name IT companies in the world. It is covered by black which is my favorite color with 16 inches screen. It also has the shape of rectangle. It is made of plastic and aluminium, it just weighs 2 kilograms so, it’s durable and lightweight for users. My laptop consists of three main parts which are CPU, motherboard and hard drive. To begin with the Central Processing Unit (CPU) or processor is considered as the brain of the computer. The basic function of CPU is to execute program instructions and coordinate all the activities of other units. The processor of computer consists of three main unit which are ALU, CU and register. I choose Ryzen 5 with processor speed of 3.5Hz. It is obvious that my ideal computer sistem is definitely fast. The next components is the motherboard which sits inside the computer case and contains most of important computer hardware parts. Finally, the har drive is used to store data for long-term use. Now, I’m using huge programs and storing a lot of videos, images, big files so I decide to choose a hard drive with its storage capacity of 512GB. In conclusion, with these component, this laptop is definitely a perfect gift for me to study, work and relax.

**UNIT 3:**

Output devices are used to reproduce or display the results of that processing like monitor, projector or speaker,... Personally, I’d prefer printer because of its strong points. A printer is manufactured by Canon in 2018. It’s covered by black which is my favorite color. It also has the shape of rectangle, made of plastic, it just weighs 1.5 kilograms. So it’s extremely durable and lightweight for users. In terms of dimensions, it is 17.7 inches wide by 12 inches long by 6 inches high. When it cames to its function, it is mainly to printer documents and scan photos or copy documents. Moreover, it features are simple wifi set up connection, auto duplex printing and mobile device printing. It has a resolution of up to 4800 x 1200 dpi (dots per inch). Beside, it can be compatible with some mobile devices like Airprint, Wifi Direct, Brother iPrint & San,…Using printer can bring some benefits for users. To be more specific, its advantages are absolutely easy to set up and reasonable price. However, it has some limitations such as a bit noisy, no display screen for error messages. In conclusion, a printer is a suitable output device to study and work.

**UNIT 4:**

The storage devices are used to store large amounts of data permanently or temporarily. They also enables users to share information with others easily under different. The storage devices consists of three types which are flash memory devices, magnetic storage devices and optical storage devices. Personally, I’d prefer USB because of its convenience bringing to users. Although a USB is widely small, it can store up to 128GB of data.Using USB can bringing som benefits for users. To be more specific, it not only allow users to store data easily but also can be used to tranfer data from one computer to another. Furthermore, a USB is definitely small and lightweight so it’s durable and portable for users. However, it has some disadvantages such as when you lose USB, you will lose all the data stored on USB. Therefore, you should use it carefully. To sum up, with these advantages, many people choose using USB for studying and working and me too.

**UNIT 5:**

Windows is the leading Operating systems servers which is widely used in the world. Windows is the proprietary source software which can be modified by the users. It was developed by Microsoft. It was first released in public on 20th November, 1985. Currently, it accounts for 80% of computer being used in the world. Its latest version is Windows 11 which is launched in 2021. Windows is mainly utilized on home computer platforms with its outstanding features such as it is easy to install, run on many different laptop brand and easy to use interface design. Using Windows can bring many advantages to users. First, with the feature of being run on many different laptop brand, Windows has good compatibility with all software, including a lot of free software. Beside, many users commented that Windows interface is easy to use – perhaps because it is the Operating system which was used for a longer time. File Explorer in Windows looks intuitive and full-feature. The next benefit, most computers using Windows are supported with many connection port to access data to the outside. However, Windows has some limitstations. To be more specific, it is poor security. The reason Windows faces more security issues because the number of Windows users is many times larger, that’s why hackers target a common numvber of users. Moreover, the speed of use is not fast. To sum up, I think users need to know their needs, if working in the office, using it alone or playing games, they should choose Windows.

**UNIT 6:**

The computer can't understand English or any other natural languages. The only language can understand is machine code called binary code. Software developers designed high-level languages such as C, C++, Java, C# and so on. Java is a programming language developed by Sun in 1995, specially design to run on the Web. Java is a programming language that plays an important role in the fields of software programming, computer science, data science, game programming and web design. Java has a rich collection of open source code in which Apache, Google and other large organizations have contributed and this library has since helped Java to grow rapidly and reach everywhere. Java programs let you watch animated characters, moving text, play music and interact with information on the screen. For me, Java is an interesting programming language but it is extremely difficult to learn. That’s all.

**UNIT 7:**

**Task 6:**

Nowadays, many people usually connect to each other via network such as internet. Using network can brings some advantages to users. First benefit of network is extremely easy to communicate with anyone. Network allow users to communicate by email, instant messenge, chatroom, video conference, etc … The next advantage of network is the ability to share data and information. File can easily be shared between users. Beside, network users can share software on the server. Finally, sharing devices such as printers help save money. Therefore, there’s no need to have individual printers for each and every computer in company. However, network has some drawbacks to users when using it. To be more specific, network permits viruses to spread quickly. Users are also exposed to hackers who break into computer system just for fun, as well as to steal information or propagate virus. Thus, security procedures are needed to prevent and protect crucial data. Moreover, server failure means no one can work. Although there may be many security risks for user, the benefits that it brings great. To sum up, computer networks are playing an increasingly important role in our lives today.

**UNIT 7:**

**Task 7:**

There are various types of wireless network such as LAN, PAN, MAN, WAN. At home, I use Local Area Network (LAN). Devices connected to a LAN are able to access data from my computer that's connected to the network. I use LAN to communicate with my relatives and friends by chat or email. I use LAN because there are many advantages when using it. Firstly, it is convenient and easy to use. I can move my mobile phone as it is a wireless network and data exchange is not affected. Secondly, if I use this type of data connection within 10 meters then my network is stable and reliable. Moreover, this network is secured because all the devices are authorized before data sharing. Lastly, no extra wires are needed in this type of network. In a campus, most connections are either Ethernet (10 Mbps) or Fast Ethernet (100 Mbps), and a few locations have Gigabit Ethernet (1000 Mbps) connections.

**UNIT 8:**

I would like to make a detailed technical report to you. The call was logged at 4.50 pm on 22nd February, 2018. John Smith from Human Resource Department phoned to ask about a problem with his computer. He had a Lenovo laptop running Windows 10, which he bought a few months ago. He had noticed a problem whenever He tried to play a MIDI file on Windows Media Player. It sounds as if he might be due to an outdated, incompatible or damaged sound card driver. I adviced him to uninstall the original sound drivers and update the lastest drivers for sound card. He tried it and his PC was working fine. And it took me 5 minutes to deal with this problem.