

國立高雄科技大學 108 學年度碩士班 招生考試 試題紙

系 所 別： 應用英語系

應用語言學與英語教學碩士班

組 別： 不分組

考科代碼： 2121

考 科： 一般英語

注意事項：

- 1、各考科一律可使用本校提供之電子計算器，考生不得使用自備計算器，違者該科不予計分。
- 2、考試科目不得攜帶字典及任何翻譯工具。
- 3、請於答案卷上規定之範圍作答，違者該題不予計分。

I. Paraphrase: paraphrase the following article with more than 250 words. (40%)

America's cellular network is as vital to society as the highway system and power grids.

Vulnerabilities in the mobile phone infrastructure threaten not only personal privacy and security, but also the country's. According to intelligence reports, spies are eavesdropping on President Trump's cellphone conversations and using fake cellular towers in Washington to intercept phone calls. Cellular communication infrastructure, the system at the heart of modern communication, commerce and governance, is woefully insecure. And we are doing nothing to fix it.

This should be at the top of our cybersecurity agenda, yet policymakers and industry leaders have been nearly silent on the issue. While government officials are looking the other way, an increasing number of companies are selling products that allow buyers to take advantage of these vulnerabilities.

These attacks have real financial consequences. In 2017, for example, criminals took advantage of SS7 weaknesses to carry out financial fraud by redirecting and intercepting text messages containing one-time passwords for bank customers in Germany. The criminals then used the passwords to steal money from the victims' accounts. How did we get here, and why is our cellular infrastructure so insecure?

The lack of action could be because it is a big task — there are hundreds of companies and international bodies involved in the cellular network. The other reason could be that intelligence and law enforcement agencies have a vested interest in exploiting these same vulnerabilities. But law enforcement has other effective tools that are unavailable to criminals and spies. For example, the police can work directly with phone companies, serving warrants and Title III wiretap orders. In the end, eliminating these vulnerabilities is just as valuable for law enforcement as it is for everyone else.

As it stands, there is no government agency that has the power, funding and mission to fix the problems. Large companies such as AT&T, Verizon, Google and Apple have not been public about their efforts, if any exist. This needs to change. To start, companies need to stop supporting insecure technologies such as 2G, and government needs a mandate to buy devices solely from companies that have disabled 2G. Similarly, companies need to work with cybersecurity experts on a security standard for SS7. Government should buy services only from companies that can demonstrate that their networks meet this standard. Finally, this problem can't be solved by domestic regulation alone. The cellular communications system is international, and it will take an international effort to secure it.

From *New York Times*. By Cooper Quintin. Dec. 26, 2018

<https://www.nytimes.com/2018/12/26/opinion/cellphones-security-spying.html>

II. Composition: write an essay analyzing the following two tables with 350 to 400 words. (60%)

Table 1:

A majority of Facebook, Snapchat and Instagram users visit these platforms on a daily basis

Among U.S. adults who say they use ____, the % who use each site ...

	Several times a day	About once a day	Less often	NET Daily
Facebook	51%	23%	26%	74%
Snapchat	49	14	36	63
Instagram	38	22	39	60
Twitter	26	20	53	46
YouTube	29	17	55	45

Note: Respondents who did not give answer are not shown. "Less often" category includes users who visit these sites a few times a week, every few weeks or less often.

Source: Survey conducted Jan. 9-10, 2018.

"Social Media Use in 2018"

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Table 2:

Substantial 'reciprocity' across major social media platforms

% of ___ users who also ...

	Use Twitter	Use Instagram	Use Facebook	Use Snapchat	Use YouTube	Use WhatsApp	Use Pinterest	Use LinkedIn
Twitter	-	73%	90%	54%	95%	35%	49%	50%
Instagram	50	-	91	60	95	35	47	41
Facebook	32	47	-	35	87	27	37	33
Snapchat	48	77	89	-	95	33	44	37
YouTube	31	45	81	35	-	28	36	32
WhatsApp	38	55	85	40	92	-	33	40
Pinterest	41	56	89	41	92	25	-	42
LinkedIn	47	57	90	40	94	35	49	-

Source: Survey conducted Jan. 9-10, 2018.
 "Social Media Use in 2018"

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90% of LinkedIn users also use Facebook

Source: <http://www.pewinternet.org/2018/03/01/social-media-use-in-2018/>