

國立金門技術學院

97 學年度電資研究所碩士班考試試題

英文

- Translate the following passages into Chinese.

1. Laptops under \$400 are real possibilities now, and some of the most buzz-worthy use Linux, such as Asustek Computer Inc.'s EeePC and the One Laptop Per Child Foundation's \$200 "XO" computer for schoolchildren. Linux also is available on slim little "netbooks" being pushed by Intel Corp. Of the 981 million PCs in existence worldwide last year, 1.7 percent ran Linux, according to Gartner Inc. That sounds paltry. But Apple's Mac operating system accounted for just 2.5 percent, and Apple is considered a significant, influential alternative to Windows. (25%)

2. President-elect Ma Ying-jeou has asked his aides to limit spending on his presidential inauguration ceremony and avoid waste, Ma's spokesman Lo Chih-chiang said late Thursday. To hold down costs, Ma's camp has decided to ask Taiwan's diplomatic allies to limit the number of visiting representatives they send to attend the ceremony, and foreign dignitaries will generally not be put up in presidential suites. Countries that are not Taiwan's allies are also welcome to send representatives, but will have to foot the bill for their air fares. Taiwan will handle their expenses after arriving in the country. (25%)

3. The widely available graphical programming environments such as LabVIEW have now reached the level of maturity that allow students and engineers to design and analyze DSP systems with ease and in a relatively shorter time as compared to C and MATLAB. I have observed that many students taking DSP lab courses, in particular at the undergraduate level, often struggle and spend a fair amount of their time debugging C and MATLAB code instead of placing their efforts into understanding signal processing system design issues. (25%)

4. Fourier analysis is named after Jean Baptiste Joseph Fourier (1768-1830), a French mathematician and physicist. While many contributed to the field, Fourier is honored for his mathematical discoveries and insight into practical usefulness of the techniques. Fourier was interested in heat propagation, and presented a paper in 1807 to the Institute de France on the use of sinusoids to represent temperature distributions. The paper contained the controversial claim that any continuous periodic signal could be represented as the sum of properly chosen sinusoidal waves. Among the reviewers were two of history's most famous mathematicians, Joseph Louis Lagrange (1736-1813), and Pierre Simon de Laplace (1749-1827) (25%)