## 國立交通大學 97 學年度碩士班入學考試試題

(稱: 資訊概論 (6015)

考試日期:97年3月9日第4節

班別:傳播研究所 組別:傳播所一般生 第1頁,共1頁

至前請先核對試題、答案卷(試卷)與准考證上之所組別與考試科目是否相符!!

According to Degrees of Separation, how many intermediary persons between the first sender and the target person by passing a message along a chain of acquaintances? Please explain it (10%)

- 2. Why the binary search is faster than the sequential search? (5%) When will we use the sequential search instead of the binary search? (5%)
- (5%) Convert the following number from hexadecimal to decimal: (a) CC
- 4. (5%) Convert the following number from binary to hexadecimal: (a) 11111111
- 5. Please explain why the public-and-private key system is more secure than a single secret key system. (10%).
- 6. (a) Is the sampling rate of 44.1kHz used for audio CDs adequate to reproduce musical sound accurately? Justify your answer. (5%)
  - (b) Can you explain why MP3 player is so popular? (You can give all the reasonable answers) (5%)
- 7. If you set up a web site which only provides advertisement, can you make money? Give the reasons. (10%)
- 8. Discuss how mobile commerce can expand the reach of electronic commerce. (10%)
- 9. What is "cookie" from software point of view? (10%)
- 10. Many Internet companies have pursued Get Big Fast (GBF) strategies. Please give the reasons. (10%)
- Please explain why broadband access is till not very popular everywhere. Give the reasons. (10%)