99 學年度聖約翰科技大學碩士班暨碩士在職專班招生考試試題
系所組別：資訊工程系碩士班丙組 科目：英文
注意事項：
1. 試題需繳回。
2. 答錯者，倒扣題分；未答者，得零分；有關數值計算的題目，以最接近的答案為準。
3. 請標明大題、子題編號作答，全部答案均須在答案卷上規定範圍內書寫，否則不予計分。

填充題 1-6 題：英文作答每題滿分 10 分；可中文作答，但是每題滿分 5 分，7-8 題每小格 5 分
1. What is your undergraduate major? ____________________________________________________
2. Which field of study do you plan to work on in this graduate program? ________________________
3. Now everyone can use the Internet without background knowledge of computer engineering. This is mostly due to the availability of the friendly software called ________________, such as Firefox or Explorer. The software is used to download pages from ________________, such as Google or Yahoo.
4. When you want to send a message to your friend by the Internet, you need to specify his or her _______________, e.g., john@sju.edu.tw, so the software knows where and whom to send it.
5. Many people use mobile phone, also called cell-phone, everyday. These electronic devices are actually small computers with specialized ______________ for telecommunications over a cellular network. The ______________ running on the mobile phones are not limited to handling of voice transmission or text messaging. In fact, many of them are video games or multimedia players; they have nothing to do with communication at all.
6. The popular Hollywood movies like Avatar (阿凡達) or Titanic (鐵達尼號) heavily depend on the technology of computer ___________ in order to render and animate the characters, objects, and scenes in very fine details.
7. John has three computers in his lab: computer A, computer B, and computer C. Both A and B have a hard-drive of 100GB capacity, each with 30GB of free space. Computer C has a 200GB drive but only 10GB of space unused.
   a. The total available space of hard-drive is ______ GB, counting the three computers.
   b. If we plan to install a 45GB database on computer A, we need to delete at least ____ GB of files from the hard-drive. If we plan to do it with computer C, then it’s ____ GB instead.
   c. The standard capacity of a DVD disc is 4.2GB. Therefore, at most ______ DVD discs of data or video can be stored in computer C’s hard-drive without compression.
8. Mary has seven computers, A, B, C, D, E, F, and G, connected by a wired network. The connections are all bi-directional. Computer A is connected to B, C, and D. Computer B is connected to E and F. Computer C is connected to F and G. There are no other connections between the computers. [建議你在試題卷上空白處或答案卷上畫圖以輔助作答：該圖正確與否與分數無關]
   a. If computer A sends a message to computer G, it has to go through computer _____.
   b. If the cable between C and F is broken, F can still receive messages from A by computer ______.
   c. If we know exactly one computer is down (not working) in the lab but computer D can get messages from E and G, then it must be ______________ which is down.
   d. At least ____ extra computer(s) need to help sending messages so E and G can communicate.