## 國立中央大學104學年度碩士班考試入學試題

所別:<u>企業管理學系碩士班 企業電子化庚組(一般生)</u> 科目:<u>資料結構 共\_/\_頁 第\_/\_頁</u>本科考試禁用計算器 <u>\*請在答案卷(卡)內作答</u>

- 1. (40%) Convert the expression ((B+A)\*C-(D-E)^(F+G)) to equivalent Prefix and Postfix notations.
- 2. (30%) You have only three-dollar and two-dollar stamps. If you have an unlimited supply of these two types of stamps, do you think that there is a number N such that for every n> N, you can make n dollars' worth of postage? Please prove your answer.
- 3. (30%) If you have one hundred million named objects and you want to store them in a data structure that lets you insert new objects quickly and search for an object by name quickly, what data structure should you use? Discuss your answer(s) with possible situation(s)

