國立中央大學八十七學年度碩士班研究生入學試題卷

所別: 資訊工程研究所 不分組 科目: 系統程式 共 1 頁 第 1 頁

Q1: Briefly describe why and when do we need to use *one-pass assembler* and *multi-pass assembler*. (14%)

Q2: Distinguish the following loaders (a) *bootstrap loader*, (b) *linking loader*, (c) *linkage editor*, (d) *dynamic linking*. (16%)

Q3: Compare and distinguish the differences between *macro* and *subroutine*. (10%)

Q4: In designing compiler, code optimization is normally done by considering an *intermediate form* of the program being compiled. Why? (10%)

Q5: Briefly describe the following compiler options (a) interpreter, (b) P-code compiler, (c) compiler-compiler. (15%)

Q6: Process scheduling is one of the important job performed by operating system. There are three states existing in process scheduling, which include running, blocked, and ready states. Plot the state transition graph that depicts the possible transitions between these three process states. (15%)

Q7: Distinguish the difference between *process scheduling* and *job scheduling*. (10%)

Q8: Briefly describe the phenomenon of *thrashing*? (10%)