

Q1: How to eliminate forward references to data items?
(10%)

Q2: What is the advantage of using *overlay* technique in implementing two-pass assemblers?
(10%)

Q3: What is a *bootstrap loader*?
(10%)

Q4: Assume there is a main program (COPY) that uses two subprograms (RDREC and WRREC); each of these is a separate control section. Suppose now that a set of utility subroutines is made available on the computer system. Two of these, READ and WRITE, are designed to perform the same functions as RDREC and WRREC. Write down the loader commands (using commands INCLUDE, DELETE, and CHANGE) if we desire to change the source program of COPY to use these two utility routines.
(20%)

Q5: What are the factors that should be considered in deciding between one-pass and multi-pass compiler designs.
(20%)

Q6: Draw the flow diagram of (a) two-level scheduling system, and (b) three-level scheduling system.
(20%)

Q7: What is the difference between *multiprogramming* system and *multiprocessing* system.
(10%)