

1. What is the purpose of communication software? (5%)
2. What information do you want the computer to know for the statement  
“int I[10][5]={50};” in C computer programming language? (10%)
3. What are the basic control structures used in designing solutions to programming problems? (15%)
4. How is structured design different from object-oriented design? (10%)
5. What is the difference between system requirements and system specifications? (10%)
6. What is the difference between a homogeneous array and a heterogeneous array? (8%) How do you implement a heterogeneous array by using C computer programming language? (7%)
7. Implement a binary full adder by using multiplexer. (10%)
8. Using C or C++ computer programming language to design a program to invert the order of an input string. (15%)
9. How is a single user/single tasking operating system different from a single user/multitasking operating system? (5%) What is preemptive multitasking? (5%)