1) What are the common characteristics of embedded systems? Explain. [4]
2) Design a processor that calculates the LCM of two numbers. [4]
3) What are the programmer considerations? Explain the software development processes according to embedded systems. [2+4]
4) Explain arbitration systems that implemented to communicate with peripheral devices from the microprocessor? [4]
5) Explain the basic functions of Real-time kernel. [4]
6) Describe the control switching mechanism. [4]
7) Define throughput of a system. [2]
8) What is PID tuning? Discuss on the practical issues related with computer based control. [2+4]
9) What is photolithography? Explain the various steps involved in photolithography. [2+4]
10) Write an assembly program to get data from PO and send it to PI and compare with corresponding C program. [4]
11) What are the differences between single-purpose processors, general-purpose processors, and application-specific processors? [2]
12) What is optimization? Explain optimization of single purpose processor in detail with suitable example. [2+4]
13) What are different types of arbitration methods used in peripherals devices to gain control of system bus. [4]
14) What are the Coffman conditions that favor deadlock? Differentiate between user-level threads and Kernel-level threads. [4+2]