References:
- RTC Chapter 1, RTC Chapter 4 (pp 53-56)
- RTEMS User Manual
- RTEMS Web Site
- Comparing RTOS to Infinite Loop Designs (RTOS-LOOP)

Please type all responses. Hand written work will not be accepted.

1. Define hard real-time system. Give an example of such a system.
2. Define soft real-time system. Give an example of such a system.
3. In what ways has the embedded development industry changed since the early 1990s?
4. List some of the common functionalities of a typical real-time OS (RTOS) and a general-purpose OS (GPOS).
5. In what ways are RTOSes and GPOSes different?
6. What did the RTEMS acronym initially stand for?
7. List at least 10 features of the RTEMS OS.
8. What tools are required to build RTEMS?
9. What host development systems are supported by RTEMS?
10. What commercial applications use RTEMS? (Find a link on the RTEMS web site.)
11. Briefly describe each of the RTEMS specific options to the RTEMS configure command.
12. List the target processors that are supported by RTEMS.
13. List the BSPs that are supported for the ARM target? for the i386 target?
14. In the application described in the RTOS-LOOP reference (see the link under the Lecture 1 area on the course web site):
   (a) Why does serial input not cause the RTOS application to block?
   (b) Why might A/D input be lost in the infinite loop application? Why does this not happen with the RTOS?