JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech IV Year I Semester Examinations, February/March - 2016
EMBEDDED SYSTEMS
(Common to ECE, ETM)

Time: 3 Hours   Max. Marks: 75

Answer any Five Questions
All Questions Carry Equal Marks
- - -

1.a) Explain different challenges in embedded computing system design.
 b) Explain about Behavioral description in formalisms for system design.   [8+7]

2.a) Explain in detail about External Memory connectivity with corresponding Timing diagram.
 b) Explain different Timer modes of operations in 8051.   [8+7]

3.a) Write ALP for ADD the unsigned number founds in internal RAM location 25h, 26h, and 27h together and put the results in RAM locations 31h(MSB) and 30h(LSB).
 b) Write ALP to find the address of first two internal RAM locations between 20h and 60h, which contain consecutive number.   [8+7]

4.a) Discuss about hardware programming through PSoC creator.
 b) Explain about Analog blocks in PSoC.   [8+7]

5. Develop the necessary source code and fundamental steps for serial communication.   [15]

6.a) Define RTOS. Explain about scheduler in RTOS.
 b) Explain about Memory management concept.   [8+7]

7. Explain various software development tools used in RTOS.   [15]

8. Describe in detail how memory organization of a SHARC processor is different from conventional general purpose processors memory organization.   [15]

--ooOoo--