[Time: 3 Hours]   **[Marks:100]**

Please check whether you have got the right question paper.

N.B: 1. **Question No. 1 is compulsory**.
2. **Attempt any four questions out of the remaining.**
3. Answer to the questions should be grouped and written together.
4. Figures to the right indicate full marks assigned to the question.

Q1	**a.** Give architectural details and addressing modes of any one of the following microcontrollers: 8051/ 80188/ 6811.	**10**
	b. Differentiate between Hard Real Time OS and Soft Real Time Os.	**05**
Q2	**a.** What is BSP? Give example of BSP in ADEOS or Win CE.	**10**
	b. What is the role of infinite loop in embedded systems? Explain its implementation in RTOS	**10**
Q3	**a.** What is priority inversion? How it can be prevented?	**10**
	b. Describe the architecture of Win CE or .NET CF or Embedded XP or Embedded Linux.	**10**
Q4	**a.** What are the common memory problems? Explain different testes in the memory testing strategy.	**10**
	b. Compare polling and interrupt to interact with the external event.	**10**
Q5	**a.** Describe Scheduler in an embedded system like ADEOS. Give its scheduling points.	**10**
	b. What is interrupt latency? Give an example of hardware and software interrupt. Describe how to service the interrupt.	**10**
Q6	**a.** Which design constraints should be considered while designing embedded system? How it differs from other computer systems.	**10**
	b. Explain in detail the software build process in Embedded System.	**10**
Q7	Write Short Note on **any 4:-**	**20**
	a. ISR – Interrupt Service Routine	
	b. JTAG	
	c. UART	
	d. ARM 7	
	e. USB	

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