B.E. Computer Technology Seven Semester

CT7041 / CT704 - Elective-I : Embedded System

P. Pages : 2 **GUG/W/18/1860**

Time : Three Hours * 1 4 4 9 * Max. Marks : 80

Notes : 1. All questions carry equal marks.
2. Assume suitable data wherever necessary.

1. a) Define embedded system. Draw and explain the architecture of Embedder system. **8**

b) Compare RISC and CISC processer. **8**

OR

2. a) Discuss the hardware design issues of Embedded system. **8**

b) Explain the process of embedded system Design & Development. **8**

3. a) What are the functions of operating system. **8**

b) What are the task and task schedules. **8**

OR

4. a) What is shared data problems? Explain with example. **8**

b) Write notes on **8**

i) Mailboxes

ii) Mutex

iii) Timers.

5. a) Draw and discuss the block diagram for the system using Assembly language programming. **8**

b) What are the benefits and drawbacks of assembly language programming for embedded system. **8**

OR

6. a) Explain ICE with the help of neat sketch. **8**

b) Briefly explain Host and Target machines. **8**

7. a) Discuss the issues related to the design using RTOS. **8**

b) Discuss the design principle used to memory space in an embedded system. **8**

OR

8.	a)	Discuss any one example of system using RTOS.	**8**
	b)	Compare Hard and soft Real time systems.	**8**
9.	a)	Briefly explain interrupts of 8051.	**8**
	b)	Discuss memory architecture of 8051.	**8**

OR

10.		Write short note on:-	**16**
	1)	UARY.	
	2)	RS-232	
	3)	Watch Dog Timer in embedded system.	

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