(04 Marks)

2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8=50, will be treated as malpractice. Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.

Sixth Semester B.E. Degree Examination, Dec.2018/Jan.2019 Embedded Systems

Time: 3 hrs. Max. Marks: 100				
Note: Answer any FIVE full questions, selecting at least TWO questions from each part.				
The control of any 11, 2 jun questions, selecting at teast 1,70 questions from each part.				
$\underline{PART - A}$				
1	a.	List out the differences between RISC and CISC architecture.	(06 Marks)	
	b.	Explain: i) Embedded system ii) Hard RTS iii) Watch Dog Timer, with an e		
		each.	(06 Marks)	
	C.	With necessary block diagram, explain the embedded system development life cyc		
			(08 Marks)	
2	a. What are the various addressing modes in an instruction? Explain each with an example.			
		1 Priofly cymleid the concept of an extended the concept of the co		
	b.	Briefly explain the concept of an execution flow of an instruction in an application		
		application. What is meant by the arity of an instruction? Explain the terms one, two, the	(08 Marks)	
	C.	instructions.	(04 Marks)	
		most devicins.	(04 Marks)	
3	a.	Compare SRAM and DRAM.	(04 Marks)	
	b.	Explain the internal diagram of DRAM and write the timing diagram for read		
		operation.	(08 Marks)	
	c.	With diagram explain direct mapping and associative mapping cache implementat		
			(08 Marks)	
4		With diagrams of the National Annual Control of the		
4	a.	With diagram explain: i) Water Fall life cycle model ii) Spiral life cycle model.		
	b. c.	What are Five steps to a successful Design? Compare functional model and architectural model.	(05 Marks)	
	C.	Compare functional model and architectural model.	(05 Marks)	
PART – B				
5	a.	Explain the operating system architecture with diagram.	(08 Marks)	
	b.	Explain Task Control Block (TCB)	(06 Marks)	
	C.	Explain Task state diagram.	(06 Marks)	
	1			
6	a.	Explain three kinds of stack	(06 Marks)	
	b.	Explain different functions of embedded operating system.	(10 Marks)	
	C.	Explain multithreaded operating system.	(04 Marks)	
7		Discuss the design of a mamory man used in mamory leading with an avample	(0 (M l -)	
/	a. b.	Discuss the design of a memory map used in memory loading, with an example. Explain Amdahl's law.	(06 Marks)	
	c.	What is a co-routine? Explain.	(04 Marks) (04 Marks)	
	d.	With suitable examples, explain how the comparison of algorithms can be done.	(04 Marks)	
		A Table 1 and 1 an	(2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
8	a.	Explain the trade tricks to optimize the code for performance improvement.	(10 Marks)	
	b.	What is time loading? Explain the primary methods used to compute the times.	(06 Marks)	
	0	Write explanatory note on Hardware accelerators	(04 Mawles)	

Write explanatory note on Hardware accelerators.