Total	No.	of	Questions	:	6]	
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SEAT No.:	
[Total	No. of Pages : 1

P533

T.E./Insem/APR-122 T.E. (E & TC) (Semester - II)

ADVANCED PROCESSORS					
		(2015 Pattern)			
Time	e:1 H	lour] [N	Max. Marks: 30		
Insti	ructio	ons to the candidates:			
	<i>1</i>)	Answer Q.1 or Q.2, Q.3 or Q.4 and Q.5 or Q.6.			
	2)	Neat diagrams must be drawn wherever necessary.	Ca		
	3)	Figures to the right side indicate full marks.			
	<i>4</i>) <i>5</i>)	Use of calculator is allowed. Assume suitable data if necessary.			
	3)	. 6.			
<i>Q1</i>)	a)	What is TDMI, Compare the ARM7, ARM9 and ARM1	1 processors.[5]		
	b)	Describe CPSR and SPSR of ARM 7 in detail.	[5]		
	(OR			
Q2)	a)	Draw and explain the Data flow model of ARM7.	[5]		
	b)	State and explain different operating modes of ARM7.	[5]		
Q3)		Draw and explain the block schematic of Timer used in			
	b)	Explain with neat diagram relation between CCLK and			
		help of VPB/APB divider. Find the configuration of			
		achieve PCLK = $30MHz$ for FOSC = $12MHz$.	[5]		
0.0	,	OR			
<i>Q4</i>)		State features of LPC2148.	[5]		
	b)	Write an ARM based ALP to add series of 8,32 bit nur	9		
		result in register and memory.	[5]		
0.5)			1.0		
<i>Q5</i>)	a)	Draw an interfacing diagram for GLCD connected with			
		port 0 and control pins from port 1 of LPC2148 and wri			
	1	C program to display square wave starting at x=y=16.	[5]		
	b)	Draw and explain the block diagram of UART1.	[5]		
00		OR Draw and avalain the interment structure of LDC2148	r <i>5</i> 1		
Q6)		Draw and explain the interrupt structure of LPC2148.	[5]		
	b)	Draw an interfacing diagram of 4×4 matrix keypad with write an embedded C program to detect the key.			
		write an embedded C program to detect the key.	[5]		

