NETTUR TECHNICAL TRAINING FOUNDATION
DIPLOMA IN ELECTRONICS ENGINEERING & EMBEDDED SYSTEM-CP04
VI SEMESTER REGULAR & SUPPLEMENTARY EXAMINATION-MAY 2023

Subject: Advanced Microcontroller – ARM   **Total Time: 2 Hr.**
Subject Code: CP04603T   **Total Marks: 50**
PART B
1.0 ANSWER ANY EIGHT OF THE FOLLOWING   2*8=16
1.1 What is pipelining?

1.2 Mention the types of FAST GPIO register in LPC2148

1.3 What are the power modes in LPC2148?

1.4 Which are the registers associated with ports in LPC2148?

1.5 Which are the two instruction set in ARM7TDMI?

1.6 Write an ALP to add two 8 bit data.

1.7 How many UART are available in LPC2148?

1.8 Which are the external interrupts used in ARM controller?

1.9 Write the types of addressing modes of LPC2148

1.10 What is the size of timers in LPC2148?

2.0 ANSWER ANY SIX OF THE FOLLOWING   3*6=18
2.1 Expand ARM 7TDMI

2.2 List the features of LPC2148

2.3 What is PLL? What is its function?

2.4 Write about the inbuilt WDT (Watch Dog Timer) of LPC2148

2.5 Write the LPC2148 interfacing program for led with switch.

2.6 What is Interrupt Vector? List the Interrupt Vector table of ARM7TDMI

2.7 Which are the two types of computer architecture? Explain

2.8 List the different Shift and Rotate instructions in ARM7TDMI

3.0 ANSWER ANY FOUR OF THE FOLLOWING   4*4=16
3.1 Write the difference between RICS & CISC architecture

3.2 Draw the block diagram of ARM LPC2148

3.3 How ARM instruction set is classified?

3.4 Explain the timer operation of LPC2148

3.5 Explain the PWM module in LPC2148

3.6 Draw & explain the structure of CPSR