

ASSIGNMENT 1 (UNIT I)

SUBMIT BY 31 MARCH, 2020. SUBMIT AS A WORD FILE AT himanshi.ece@dcrustm.org

The file submitted has to be your own work. It should not have similarity from sources present on web.

Similarity check of assignments will be done randomly.

Question		Marks
1	Differentiate Harvard and Princeton processor architectures.	5
2	Give examples of RISC and CISC processor architectures and Justify the classification.	5
3	What are various challenges of embedded architectures?	5
4	List various development tools for embedded system design.	5

ASSIGNMENT 2 (UNIT II)

SUBMIT BY 4 APRIL, 2020. SUBMIT AS A WORD FILE AT himanshi.ece@dcrustm.org

The file submitted has to be your own work. It should not have similarity from sources present on web.

Similarity check of assignments will be done randomly.

- 1 If XTAL frequency of 8051 is 8 MHz, find the time taken to execute following program 5

```
MOV R2, #04  
MOV R1, #06  
WAIT : DJNZ R2, WAIT
```

- 2 Write an ALP for finding maximum value in an array. 5
- 3 Comment on addressing mode of following instructions: 5
- i) MOV A, #25H
 - ii) MOV R6, A
 - iii) MOV 56H, A
 - iv) MOV @R0, A
 - v) MOVC A, @ A+DPTR
- 4 Interpret MOV TMOD, #02H 5
- 5 How is PSW affected by “DIV AB” 5
- 6 What is the value of bits (4-7) of R0 in following 5
- MOV @R0, #04H
MOV A, #11H
XCHD A, @R0
- 7 Draw internal RAM structure of 8051. 5
- 8 What are various SFRs associated with following modules in 8051 5
- i) TIMERS
 - ii) SERIAL COMMUNICATION