

29764

Name :

Reg. No:



SEVENTH SEMESTER B.TECH DEGREE EXAMINATION, OCTOBER 2019

AI 09 L06 – DSP CONTROLLERS

Time : Three Hours

Maximum : 70 Marks

PART - A

1. What is pipelining?
2. Give an example for fixed and floating point format?
3. Differentiate between IIR and FIR filter?
4. What is the purpose of the assembler?
5. Why PID controller are needed?

(5x2=10)

PART B

Answer any four questions

6. Explain about the DMA process?
7. What are the coding constraints? Explain?
8. Find the DFT of the sequence $x(n)=\{1,2,3,3\}$
9. Explain any one code optimization procedure?
10. What is voice scrambling? Explain?
11. What is the purpose of AI?

(4x5=20)

PART C

- 12.a) Describe the architecture of TMS 320C6x
(Or)
b) Discuss the addressing modes of TMS 320C6x
- 13.a) Briefly describe in detail about TMS320C64x
(Or)
b) Write a program to do matrix multiplication and to determine the eigen value of a matrix
- 14.a) Explain the applications of Adaptive filter?
(Or)
b) Find the FFT of the sequence $x(n)=\{1,2,3,4,4,3,,2,1\}$ using DIT algorithm
15. a) Describe in detail any two tools used for software development in DSP environment
(Or)
b) Discuss any two applications of DSP

(4x10=40)
