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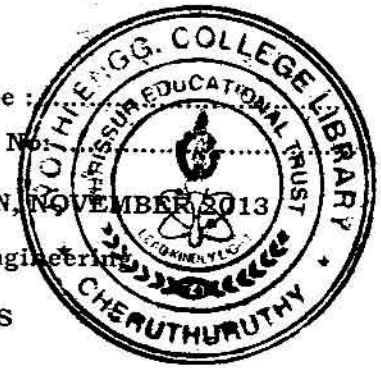Name : ....

Reg. No : ....

SEVENTH SEMESTER B.TECH DEGREE EXAMINATION, NOVEMBER 2013

Applied Electronics and Instrumentation Engineering

AI 09 705 L06 – DSP CONTROLLERS
(2009 Scheme)

Time : Three Hours

Maximum : 70 Marks

PART A
Answer all Questions

1. Write down the major differences between a microprocessor & DSP Processor
2. List the major interrupts of TMS 3206X family
3. Give the data types in TMS 32064X with one example each
4. Write down the transfer functions of General FIR & IIR systems
5. What is meant by codec

(5X2marks)

PART B
Answer any four questions

6. Write down the concept of pipelining? . in TMS320C6X family how it is implemented?
7. Explain the data types of TMS 320 6X family
8. Explain the I/O ports of TMS 320 64X processor
9. Explain the term code optimization in the context of DSP programming
10. Write short note on the role of DSP in PID controllers
11. Discuss the features of compilers in DSP system

(4x5marks)

PART C

12. With a neat sketch Explain the architecture of a typical processor belongs to TMS320C6X family

OR

13. Explain various addressing modes & DMA scheme of TMS320C6X family

14. Explain the addressing modes of TMS 32064X with examples

OR

15. Write down the assembly language program code for circular & linear convolution
16. Write short note on software pipelining & circular addressing

OR

17. What is meant by adaptive filtering ? give example in noise cancellation system
18. Explain the various components of DSP Development system

OR

19. Explain DSP application in Communication & Audio video systems

(4x10marks)

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