

15886 A

Name:

Reg.No.

EIGHTH SEMESTER B.TECH DEGREE EXAMINATION, JUNE 2011

EC/ AI/ BM/ IC 804 (A) - DSP CONTROLLERS (2004 ADMIN)

Time: 3 Hours

Maximum: 100 Marks

(Answer ALL Questions)

- I
- (a) Briefly explain about the term "Fetch and excute" in TMS320C6X.
 - (b) What is the use of timers in TMS 320C6X processor? Briefly explain.
 - (c) Compare the Fixed and floating point formats.
 - (d) Write a briefly note on "constaints" in TMS320C64X.
 - (e) Write a short note on FIR filters.
 - (f) Write down the procedure for code optimization. Explain about it.
 - (g) Briefly discuss about support tools and files.
 - (h) Discuss in detail about PLL.

(8×5 = 40)

- II
- (a) Write a short note of the following
 - (i) Pipelining
 - (ii) Addressing modes
 - (iii) Instruction sets

(OR)

- (b) (i) Draw and explain the functional block diagram of TMS320C6X.
- (ii) Discuss in detail about DMA controllers.

- III
- (a) With neat diagrams explain the functions of CPU of TMS32016X.

(OR)

- (b) What is assembly language programme? What are all the uses of it? Write any simple assembly language programme and explain the instructions used it.

- IV
- (a) Explain in detail about any one method of adaptive noise cancellation.

(OR)

- (b) Discuss in detail about software pipelining.

- V
- (a) Discuss in detail about code compressor studio.

(OR)

- (b) Explain the following in detailed way for DSP applications.
 - (i) Voice scrambling
 - (ii) Image processing
 - (iii) Multirate filters.

(4×15 = 60)
