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Name:.....

Reg.No:.....

EIGHTH SEMESTER B-TECH (ENGINEERING) DEGREE EXAMINATION, MAY 2012

EC/AI/BM/IC 04 804 A - DSP CONTROLLERS

Time: 3 hours

Max. Marks : 100

Answer all questions

Part A

- I. a) What are different registers in TMS320C6X processor? List out the applications of it.
- b) Briefly explain the function of timers in TMS320C6X processor.
- c) What is fixed point formats? Give one example for it.
- d) Write a brief note on "Constraints".
- e) Compare the DFT and FFT.
- f) Explain about Code Optimization with an example.
- g) Explain briefly about the functions of support tools and files.
- h) What do you mean by Voice Scrambling? Explain briefly.

(8 × 5 = 40)

Part B

- II. a) With neat sketches, explain the architecture of TMS 320C6X processor.
OR
(b) (i) Write a short technical note on pipelining.
(ii) Discuss in detail about the function of DMA Controller.
- III. a) Explain the function of Central Processing Unit of TMS320C64X processor with suitable diagrams.
OR
(b) What is the use of assembly language programme? Explain the function with suitable example.
- IV. a) Explain in detail about the function of Adaptive filters. Give an example for noise cancellation.
OR
(b) Discuss in detail about software pipelining.
- V. a) Discuss in detail about Code Compressor Studies.
OR
(b) Write a short technical note of the following:
(i) Multirate filters.
(ii) PID Controllers.

(4 × 15 marks = 60 marks)
