

Code No. 8995 / CBCS/ Non-CBCS

## FACULTY OF SCIENCE

M. Sc. III – Semester (CBCS / Non-CBCS) Examination, December 2013

Subject : Physics

(Specialization: Electronics Instrumentation)

Paper – IV (304) : Micro processors DSPS &amp; Interfacing

Time : 3 Hours

Max. Marks: 80

**Note :** Answer all questions from Part–A and Part–B. Each question carries 4 marks in Part–A and 12 marks in Part – B.

**PART – A** (8 x 4 = 32 Marks)  
(Short Answer Type)

1. ✓ List and explain addressing modes of 8086 $\mu$ P. ✓
2. ✓ Explain PROM decoder with help of neat diagram.
3. ✓ Write about parallel I/O methods. ✓
4. ✓ Draw the Internal diagram of programmable communication Interface (8251).
5. ✓ Discuss the Bus structure of DSP TMS 320C5X ✓
6. ✓ Explain flags in status register of DSP TMS 320 C5X.
7. ✓ Explain Load and store instructions of DSP TMS 320 C5X.
8. ✓ What is NORM instruction? ✓

**PART – B** (4 x 12 = 48 Marks)  
(Essay Answer Type)

- 9.(a) Write an ALP for multiplication of two 16 bit unsigned numbers.

OR

- (b) Explain the pins and signals of 8086  $\mu$ P.

- 10.(a) ✓ Draw the Block diagram of programmable peripheral interface (8255) and explain the mode O operation.

OR

- (b) Distinguish between Pentium and Pentium-pro micro processors.

- 11.(a) ✓ Explain the Internal Architecture of DSP TMS 320 C5X with the help of neat Block diagram.

OR

- (b) Explain on chip memory and on chip peripherals of DSP TMS 320 C5X.

- 12.(a) ✓ List and explain addressing modes of TMS 320 C5X with suitable examples.

OR

- (b) Explain program control instructions and peripheral control instructions.

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