

Seat No. \_

King Mongkut's University of Technology Thonburi

Final Examination

1st/2010 Semester

Course: CPE 452(3) *Selected Topics in computer Eng. II*  
Acoustics of Musical Instrument and PA systems

For : CPE Students (3rd and 4th years - class A-D)

Date : Tuesday 5th October 2010

Time : 9.00 a.m. - 12.00 a.m.

Instruction: 1. Closed-Book Examination

2. A calculator is allowed.

3. A sc.-formula Ruler is allowed.

4. There are 4 problems in 7 pages.

5. Do all problems in these sheets.

Student Name : \_\_\_\_\_ (capital letter)

Student ID No. : \_\_\_\_\_

Problem 1 \_\_\_\_\_ (15 marks)

Problem 2 \_\_\_\_\_ (15 marks)

Problem 3 \_\_\_\_\_ (10 marks)

Problem 4 \_\_\_\_\_ (10 marks)

Total \_\_\_\_\_ (50 marks)

Assoc. Prof. Boonruk chipipop

Designer

1) a. What is resonance?

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(3 marks)

1) b. What is vibration sensitivity?

(3 marks)

1) c. What is Helmholtz resonator? (3 marks)

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1) d. What are node and anti-node of a vibrating string?  
(3 marks)

1) e. what are node and anti-node of a vibrating plate?  
(3 marks)

2) Show vibration modes of string and body (plate) of the violin at 44 Hz, 66 Hz and 88 Hz. (15 marks)

3) What do you know about analog and digital mixer?  
(Explain as much as you know.)

4) What do you know about Driverack?  
(Explain as much as you know.)

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