

Prince of Songkla University
The Faculty of Engineering

Final Examination Semester II

Academic Year: 2005

Date: February 27, 2006

Time: 13:30 -15:30

Subject: 225-602 Human Factors Engineering

Room: A201

ทุกชนิดในการสอบ โทษชั้นต่ำคือ ปรับตกในรายวิชานั้น และพักการเรียน 1 ภาคการศึกษา

The exam is divided into 2 Parts:
Part I is a take-home exam, and Part II is an in-class exam.

DIRECTIONS FOR PART II

1. One sheet of notes, non-programmed dictionaries, and calculators are allowed.
2. 4 questions are given on page 2.
3. Total score in part II is 80.
4. Please check all questions/ pages before start working.

Good Luck
Asst.Prof.Dr. Angoon Sungkha-pong



PART II

1. You are assigned to design displays and controls of an electrical- equipment which will be located in a noisy shop. The displays must show status of the controlled process. However, the operator needs to record some data from the continuous process for next analyses if necessary. What are your proposed displays and controls for this equipment? [Hint: clear explanation in concept and factors that affect your design are needed. Some more information may be assumed.] (20 points)
2. According to design guidelines (as discussed in class) for serviceability, security, vandalism prevention, safety, usability, the physically disadvantaged, and the environment. Base on your experience; show me five market-products with comments on positive and negative aspects. (20 points)
3. Explain the relationship between anthropometric data and design of effective controls. Three nice examples of controls are needed. (20 points)
4. How would you apply Ergonomics for productivity improvement? Explain clearly by using diagram. (20 points)

*****GOOD LUCK*****

