

PRINCE OF SONGKLA UNIVERSITY

THE FACULTY OF ENGINEERING

Midterm Examination Semester II

Academic Year 2005

Date: December 16,2005

Time: 13:30 – 16:30

Subject: 225-465 Value Engineering and Cost Analysis **Room:** R306

Instructions :

- 1) Answer all questions.
- 2) All books and materials are allowed.

ทูลริตในการสอบ โทษชั้นต่ำปรับตกในรายวิชานั้น
และพักการเรียน 1 ภาคการศึกษา

1. What is *Value Engineering*?. Explain the benefit of VE in product design.

(20 points)

2. Explain the method of value added of the product as the following:

2.1 preserved egg

2.2 dried banana slices coated with sugar.

2.3 toothpicks

2.4 name card

(20 points)

3. Analyse and list the basic functions of the items as the following:

3.1 a bottle of drinking water

3.2 a pocket pc

3.3 drawing table

3.4 a toothbrush

(20 points)

4. Assume the basic functions from 3.1, draw a sketch design of innovation for a drawing table and determine costs of functions.

(20 points)

5. Draw a sketch design of innovation for the products as the following:

5.1 product made from used paper

5.2 product made from rubber leaf

(20 points)

Prepared by

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