

PRINCE OF SONGKLA UNIVERSITY

THE FACULTY OF ENGINEERING

Midterm Examination Semester II

Academic Year 2007

Date: December 28,2007

Time: 09:00-12:00

Subject: 225-465 Value Engineering and Cost Analysis **Room:** R300

ทฤษฎีในการสอบ โทษขั้นต่ำคือ ปรับตกในรายวิชาที่ทฤษฎี และพักการเรียน 1 ภาคการศึกษา

Instructions :

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

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1. What are the benefits of *Value Engineering* in product design ? (15 points)
 2. What is the objective of VE phase as the following:
 - 2.1 selection phase
 - 2.2 function phase
 - 2.3 creation phase
 - 2.4 evaluation phase (20 points)
 3. When should a Value Engineering study be undertaken? (15 points)
 4. What comprises a successful VE study? (10 points)
 5. Analyse and list the basic functions of the products as the following:
 - 5.1 chalk
 - 5.2 rubber band
 - 5.3 diary
 - 5.4 cup of tea (20 points)
 6. Assume the basic functions from 5.1 and 5.2 , draw a sketch design of innovation for rubber band and a cup of tea. (20 points)

Prepared by

Assist. Prof. Kamron Pita ks

