Advanced Cost Accounting
April 28th, 2015
University of Oulu

The test has four questions and a maximum of 24 points. Please use complete sentences in answering the essay questions (i.e. no bullets, lists etc.). Kysymyksiin saa vastata suomeksi mutta ammattisanastoa tulee tällöin käyttää tarkasti.

1) How should product diversity influence the design of costing systems? What were the key results of the field study of Abernethy et al. (2001)?

2) Activity-based costing (ABC) is a costing system that was developed in the 1980s as a result of an increasing awareness in businesses of the deficiencies of traditional approaches to production overhead absorption.

   a. Describe the main deficiencies in the traditional product costing system which ABC seeks to correct.
   b. Identify and comment upon a significant advantage and a significant disadvantage associated with the typical implementation of an ABC system
   c. A tree nursery is considering a change of product mix in its inventory. The manager wants to estimate the product cost of different types of trees. There are no activities that lead to direct costs. Indirect costs are identified and estimated for the following activities: watering, repotting and administration. Total estimated annual costs for each activity, the cost driver for each activity and the expected annual usage of each cost driver are as follows:

Activity	Estimated costs	Cost driver	Estimated usage of cost driver
Watering	50.000	Number of threes	500.000
Repotting	100.000	Number of repots	200.000
Administration	75.000	Number of different types of threes	500

   What are the estimated costs of 100 royal oaks, each of which requires one repotting each year?

3) Relating to absorption costing systems

    a. A company uses a flexible budget to forecast annual plant-wide overhead, which is then allocated to jobs, based on machine hours. The annual overhead budget is forecasted to be €6.000.000 of fixed costs plus €120 per machine hour. The expected number of machine hours for the year is 20.000. The estimated application rate includes both fixed and variable overhead costs. At the end of the year, 21.000 machine hours were used and actual overhead incurred was €9.140.000

        i.   Calculate the application rate set at the beginning of the year.
        ii.   Calculate the amount of over- or underabsorbed overhead for the year.
        iii.   The company policy is to write off any over- or underabsorbed overhead to the cost of goods sold account. Will net profit rise or fall this year when the over- or underabsorbed overhead is written off to cost of goods sold? Please explain why.

    b. Explain the following briefly and concisely

        i.   Expected volume and normal volume
        ii.   Why are prospective overhead rates used to assign overhead costs to jobs?
        iii.   Why are input measures used in calculating prospective overhead rates?

4) How does the concept of death spiral relate to cost accounting according to Zimmerman? Discuss the different situations in which the phenomenon of death spiral can occur. What is the source of death spiral? What kind of solutions are there to the death spiral.