ICT Service Management
Example Questions

Question 1

(Evaluation: 3 points)

Consider the following list of software management activities. Indicate for each activity what CMM level is required to conduct the activity and motivate shortly your answers.

a. Basic cost tracking

b. Business requirements tracking (checking the realisation of business requirements in the final software)

c. Customize the meta-model of the repository for the software tools

Question 2

(Evaluation: 3 points)

Consider the following list of deltas for a software product, called ZZM. The baseline product was produced with the following makefile

```
ZZM     :   a.o   b.o
            linkit a.o   b.o   ZZM
a.o     :   a.c   incl.h
            compile      a.c
b.o     :   b.c
            compile      b.c
```

on an IBM AIX platform.

Delta1:	Correct some defects in a.c
Delta2:	Changes to incl.h and additional functionality in b.c
Delta3:	Create a WINDOWS/NT variant of ZZM, using the same incl.h file
Delta4:	Correct some defects in b.c for the WINDOWS/NT variant

Develop a clear description of the combined product/version space. Motivate your choice for a product first versus version first or intertwined representation.

Question 3

(Evaluation: 4 points)

Steve Meticolous was the new software product manager at ACME Software Inc. He desired to monitor the productivity of the different software engineers and developed the following procedure.

a. Count the modules that are developed by each software engineer.
b. Give the modules a "label" L(ight), M(edium) and H(eavy) according to the number of procedures and functions in the module. Light modules have less than 15 procedures/functions, while Heave modules have more than 60 procedures/functions.
c. Count the Light modules as 1, the Medium as 3 and the Heavy modules as 7, and add the result to get the "weighted module count".
d. The productivity of the software engineers is measured in personhours per weighted module count.

1. *Do you agree with this procedure ? Formulate your remarks.*

2. *Is the statement "Engineer X is twice as productive as engineer Y" a meaningful statement ?*

Question 4

(Evaluation: 3 points)

"The higher the CMM maturity level, the closer an organization will meet the six-sigma-requirement !"

Do you agree with this statement ? If so, provide some evidence why this statement would hold. If not, explain why.