

**EXAMINATION OF THE LITERATURE  
RELEVANT FOR THE COURSE PIM (GEO4-2252)**

**Thursday May 6, 2010**

**Question 1**

- a) Which phases and sub-phases in the innovation funnel described by Tidd et al can be distinguished and what do they mean?
- b) What are routines and give some examples for each phase in the innovation funnel?
- c) Describe and explain the Viable System Model presented in Schwaninger.
- d) What is the critical assumption underlying the VSM in order to function well?
- e) How are the (sub)phases of the innovation funnel related to the management functions identified in the VSM?

**Question 2**

- a) The canon of innovation literature consists of various strands of innovation theories. Mention the different strands and, per strand, what is the key question/topic?
- b) Describe main *concepts* involved, and *level of analysis* of:
  - 1. Large Technical Systems
  - 2. Evolutionary economics
  - 3. Technology cycles
- c) For which kind of innovation problems is Rogers' theory on Diffusion of Innovation an appropriate approach and *why*?
- d) Select two *theories* for studying the successfulness of a new technology for an individual organization and give reasons *why* these theories are appropriate?

**Question 3**

- a1) In which part/stage? of the innovation funnel occurs the strategic positioning of the firm?
- a2) What is strategic positioning about and what are important routines to be executed?
- a3) What theory drives the execution of the routines?
- b1) What resources are addressed by the Resource Based View (RBV)?
- b2) What are important routines for realizing the RBV?
- b3) What do these routines entail?
- c1) Which (sub)phases of the innovation funnel are addressed by von Hippel's user-producer-interaction theory and by Roger's adoption-diffusion theory?
- c2) Which routines are related to these theories?
- c3) What do these routines entail?
- d1) To which sub-phase does Cooper's stage-gate model apply?
- d2) What is described in? the stage-gate model?
- d3) Which routines should be executed to realize the stage-gate model in practice?