

Student Name:.....

(Qualitative) Research Methods for the Information Sciences (code 400290)

02 April 2008

FINAL EXAM

VU University Amsterdam (VUA/FEW/I)

IMPORTANT NOTICE: This is a **closed book** exam. You are supposed to answer the questions on your own, i.e. without the use of a computer, books or any other material and without discussing the exam with anyone else. Cheating is not tolerated and will be handled according to strict University policies.

This exam has been designed to test your overall knowledge and understanding of the material covered in the course. It consists of **a set of questions for a total of 100 points**. The exam score is your total number of points divided by 10, and yields 2/3 of the final mark for this course; the remaining 1/3 comes from your score for the MSc review essay assignment.

Please make sure to use *the present form* for your answers, and use the space provided under each question. Answers will be evaluated based on content rather than length. In other words, there are no extra points for providing needlessly long answers. You are free to answer in English or Dutch.

This exam is not meant to be stressful and should not take you much more than one hour to complete if you have carefully studied the course materials. But: **Please make sure that your handwriting is legible and that you have printed your name at the top of each page. Good luck!**

Student Name:.....

Student ID Number:.....

Points:

- 1) ___ out of 20
- 2) ___ out of 15
- 3) ___ out of 15
- 4) ___ out of 20
- 5) ___ out of 30

Points total: ___ out of 100 (**Exam score = points/10**)

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Question 1 (20 points):

The interview is one of the most common and practical research methods in the Information Sciences.

Question 1a: List three different types of “interview” and give their typical format and purpose.

1. (5 points – limit your answer to 3 lines):

2. (5 points – limit your answer to 3 lines):

3. (5 points – limit your answer to 3 lines):

Question 1b (5 points):

Give a practical *example* of a research situation or problem where the interview would be a good method to use.

Question 2 (15 points):

The “research design” is one of the key scientific concepts in the early stages of conducting a research study. Give a (concise) definition of what a research design is.

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Question 3 (15 points):

The “validity” of results and claims is a central concept in scientific research; but there are many different types of validity.

Question 3a (5 points):

Explain what “internal validity” means. Limit your answer to 4 lines.

Question 3b (5 points):

Explain what “external validity” means. Limit your answer to 4 lines.

Question 3c (5 points):

Explain the difference between internal and external validity, and show it by giving a *concrete example* that clearly demonstrates what the difference is. Limit your answer to 5 lines.

Question 4 (20 points):

In research, different types and methods of reasoning and argumentation are in use.

Question 4a (5 points):

Explain what “deduction” is. Limit your answer to 5 lines.

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Question 4b (5 points).

Explain what “abduction” is. Limit your answer to 5 lines.

Question 4c (5 points):

Give a practical *example* of a research situation or practical problem where deduction is a good method to use. Limit your answer to 5 lines.

Question 4d (5 points):

Give a practical *example* of a research situation or practical problem where abduction is a good method to use. Limit your answer to 5 lines.

Question 5 (30 points):

Suppose that you have been asked by the Dean of the Faculty of Exact Sciences to investigate the following issue. The Board of the Faculty (Faculteitsbestuur, FB) worries about the rather low number of high-school students enrolling in the Informatics Bachelor studies (IMM, INF, AI). The Dean now asks *you* (yes!) to find out: (1) What are the *perceptions* that high-school students have concerning Informatics-type studies at the university? (2) What are the main *motivations* that lead them to make a choice for a certain university study?

Clearly, this is not an easy problem that has a simple answer (otherwise, Dean and FB would not be worrying about it). So, describe how you would approach this research issue, by answering the following two questions (and limit your answer to about 30 lines or slightly over 1 page):

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Question 5a (12 points): Clearly, the Dean asks you to investigate a very broad overall issue. So, a first step in scientific research is to decompose the overall issue into several more specific research questions to which you can actually find an answer as a result of your study. Discuss what in this case would be *your* decomposition into specific *research questions*.

Question 5b (18 points): Based on the different research questions you developed in Q5a, come up with a *research design*, i.e. explain which *research methods* you would employ to obtain answers to each of the research questions you defined above.

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Feedback (optional):

- If you feel that a question was unclear, please indicate below the number of the question and provide a brief explanation.
- Was preparation for this exam a good way to get you to go over the class material again? Would you have reviewed the material otherwise?
- Do you feel that this exam was fair as a test of your knowledge about the course material? If not, what would you have done differently?
- How long did it take you to finish this exam?