Home exam, MF2071 2016

The deadline is shown in the course memo/PM for MF2071. This is an individual assignment and it is your responsibility to know what that means. Since the assignment is individual, cooperation on this examination is not allowed. Read the KTH policy for plagiarism[1] and the course syllabus for clarification.

Each solution must include reasoning and proof, either with analysis, examples or quotations using correct citations***. Use terminology from the course, but do not use examples from the course material.*** If you need help with the learning process during the home exam, please contact the course teachers. Read the course syllabus on the prescribed way to contact the teachers (and read the entire course syllabus before contacting the teachers).

Read the following documents before you start answering the questions:

- **Course-PM for MF2071**
- **Information Retrieval & Management (2014 revision)**
- **DevelopingYourInformationNeed (English)**

Question 1 Create an information need
Information needs can be simple or advanced. An advanced information need usually consists of several simpler needs. This course requires an information need that is well defined, not to general and not to narrow.

A/ Describe your field of studies and its scientific context. Break out an information need that you find relevant. It is good if this information need is for your thesis or a similar report. Try to be as specific as possible.

B/ Use the problem from question 1A. Can you find different angles to approach this problem/ information need? Describe why this is an advanced information need. Also describe which sources you need to solve the information need. (Hint: If you can't find any reasons to why you would need information from several sources the information need is not advanced enough for this course).

Question 2 Information searching
When you start searching we expect that you have a clear goal. You will have to analyze your information need and identify which parts of the research question that can be used to form interesting keywords.

Before answering these questions, choose one database (called "X" below) from the list of databases available at kth.se/kthb (under Databases and search tools https://www.kth.se/en/kthb/sokverktyg/databaser-och-soktjanster-1.546373).

Write down in your answers below what database X you have chosen, that is, write what X equals. If you don´t, you will fail the exam.

A/ Break out relevant keywords from the information need that you specified in question 1A.

B/ Find synonyms to these keywords. Make a list and describe why they are relevant to your information need.

C/ Combine all these keywords in search blocks in a correct way, meaning that you should formulate a set of complete (where complete means *syntactically correct** for the search interface of database X) search strings which you believe will be a productive search strategy in database X to fulfil your information need. At least one of these search strings *must* include at least four different synonyms and at least two different Boolean operators (otherwise you will fail the exam, automatically).

(*Note: A "syntactically correct search string" is a string that does not give an error message or a totally worthless/unproductive hit list when testing it in X. You must therefore test your search strings in the

[1] http://intra.kth.se/regelverk/policyer/policy-for-hantering-av-plagiering-inom-kth-s-utbildning-1.61391 , especially chapter 5.

search interface for database X. If a string in your answer is not syntactically correct, then you will fail the exam.)

D/ Explain why you combined the search words like this and why you think this will be a productive search strategy!

E/ So-called *field-based searching* (using the fact that the bibliographic information for each document in the database is indexed in specific bibliographic fields) can many times be a more precise way of searching. Can this be the case for your search question? If yes, write complete, productive and syntactically correct search strings (for database X) that continue your search strategy from 3C. If no, present a convincing argument why this is not the case.

F/ Describe how to perform a *iterative* search in scientific information searching. How would you iterate the searches you made in 2 C-E? Write down complete search strings, syntactically correct for your database X.