



Institutionen för Data-
och Systemvetenskap

***:48 and INT2 Electronic
Mail and Computer
Mediated Communication**



STOCKHOLMS
UNIVERSITET



KUNGLIGA
TEKNISKA
HÖGSKOLAN

Exam 2000-02-26

*You can submit the exam in Swedish or English, but if you want the text of the exam questions in English, you should notify Jacob Palme at least two weeks in advance.
Examen på svenska på andra sidan.*

***Please write your e-mail address on the outside of
the folder with your exam. Print very legibly.***

Allowed documents during the exam: Ordinary language dictionaries to and from Sweden and English.

To pass this exam, you will have to have a certain minimum number of points separately on question 1-2 and on question 3-4.

Carefully read the questions and check that your answer is really an answer to the question. As an example, in one exam a question was "Describe important characteristics with non-simultaneous computer conferencing systems, and which makes them different from electronic mail systems". One student gave a thorough description of the differences between computer conferencing and face-to-face meetings. Such an answer will regrettably give no points at all!

Jacob Palme can be reached by phone during the exam on phone 08-664 77 48 between 11-13 o'clock.

No.	Question	Max. score
1	<p>What is meant by "breakdown analysis", as a method of judging the quality of groupware? Discuss the merits and dismerits of this method.</p> <p>Reply:</p> <p>Breakdown analysis is a method, where you analyze when people using groupware begin discussing or having problems with the groupware itself, instead of with the task they are to use the groupware for.</p> <p>Advantages: Simple measurable, can give good insight into problems with groupware.</p> <p>Disadvantages: Will only illustrate some aspects of the groupware. Results depend very much on user's computer experience and experience with the groupware itself. "Breakdowns" are not always a bad thing, the groupware is part of the culture and there is a reasonable need to be able to discuss the cultural environment.</p>	6
2	<p>How does Computer Mediated Communicatin (CMC) change the communication patterns in an organisation, and are these changes beneficial or not?</p>	6

Reply:

More contacts at larger organizational distances. More time spent on communication. Communication in larger groups becomes more efficient. People can communicate independent of the hierarchical structure of an organization. Young people and people who are not bosses are aided, so that equality in an organization increases.

Benefits: People learn from each other, can solve problems faster, less risk of getting stuck in inoptimal behaviour, faster adjustments to a changing world.

Cons: Can take too much time (certain topics tend to cause lots of flaming and never be resolved), create information overload, cause people to optimize their own needs rather than that of the organisation.

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| 3 | Does e-mail contain a trace list of the stages of transmission of a message? If yes, how does it work, and what can it be used for? | 6 |
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Reply:

Yes, as a list of "Received:" header fields at the top of the RFC822 message heading. Each passing of the message from one MTA to another causes an entry to be added. Useful for finding out the cause of problems with e-mail. Can also be used for loop control purposes.

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| 4 | The original SMTP protocol includes a number of small steps of interaction between two transmission agents. ESMTP has a method for reducing the disadvantage caused by these steps. Describe this method and discuss its pros and cons. | 6 |
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Reply:

The facility is called "pipelining". If both MTAs agree, the sending MTA can send new SMTP commands without waiting for the responses on previous SMTP commands.

Pros: Can make SMTP transmissions much faster.

Cons: Backtracking difficulty if an error occurs. Since, however, most message transmissions do not cause any error, the Pros outweigh the cons.