



Institutionen för Data-
och Systemvetenskap



STOCKHOLMS
UNIVERSITET



KUNGLIGA
TEKNISKA
HÖGSKOLAN

***:96 (SU) and 211263 (KTH)
Internet Application Protocols
and Standards**

Exam-2006-05-17-solved.doc

The following documents are allowed during the exam:

1. Documents in Compendium 1, printed on colored paper.
2. Documents in Compendium 2, printed on colored paper.
3. Documents in Compendium 3, printed on colored paper.
4. Documents in Compendium 7, printed on colored paper.
5. Documents in Compendium 9, printed on colored paper.
6. Ordinary language dictionaries between English and Swedish.

Note 1: Compendium 0, 4, 5, 6 and 8 are not allowed during the exam.

Note 2: The exam supervisor will check that you do not have copies of the disallowed compendiums. Bringing such compendiums on colored paper is cheating and can result in suspension of your rights to study.

Note 3: Underscoring and short handwritten notes in the yellow documents are allowed.

Note 4: A few copies of the allowed compendiums will be available for loan during the exam for students who have not brought the compendiums.

Important warning

It is not acceptable to answer an exam question by just a verbatim quote from the allowed documents above. You must show that you understand the question and your answer by using your own words.

Jacob Palme will come to the exam rooms about 18:00 to answer questions regarding the exam.

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No.	Question in English	Question in Swedish	Max points
1	Write HTML and CSS to achieve the following result:	Skriv HTML och CSS för att få följande resultat:	6

Welcome, everybody!

This exam takes place in Forum, Kista, on the 17th May 2006 at 16:00 hours.

Use of the HTML <table>, and elements are not allowed.

Det är inte tillåtet att använda HTML-elementen <table>, och .

Answer:

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html><head>
<style type="text/css">
.box {
    font-family: Verdana, Arial, Helvetica, sans-serif;
    font-size: small;
    width: 40ex;
    border: medium dotted;
    padding: 8px;
}
.bigword {
    font-family: Verdana, Arial, Helvetica, sans-serif;
    font-size: x-large;
    font-weight: bold;
    text-transform: capitalize;
}
.normalsize {
    font-family: Verdana, Arial, Helvetica, sans-serif;
    font-size: medium;
    font-weight: bold;
}
</style>
</head><body>
<p><span class="bigword">Welcome,</span>
<span class="normalsize">everybody!</span></p>
<p class="box">This exam takes place in Forum,
Kista, on the 17th May 2006 at 16:00 hours.</p>
</body></html>
```



No.	Question in English	Question in Swedish	Max points
2	Which are the main differences between POP and IMAP?	Vad är de viktigaste skillnaderna mellan POP och IMAP?	6

Answer:

Main differences between POP and IMAP:

1. IMAP tillåter att ha en långtidsuppkopplad session och få information när något nytt brev har anlänt.
2. Brev på servern kan sparas längre tid och sorteras i mappar.
3. Man kan söka och bearbeta mängden brev på servern.
4. Man kan vidareända brev direkt från serverns kopia av brevet.

3	How is it possible, using CSS, to specify that the contents of a <DIV> element is centered in the browser window, with equal amount of white space to the left and the right of the object.	Hur kan man, med användning av CSS, specificera att ett element av typ <DIV> skall centreras i webbläsarens fönster, med lika mycket vitt utrymme till vänster och öger om objektet.	6
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Answer:

Following the standard, it should be enough to specify in the CSS area

```
#container
{
    margin: 1em auto;
    width: 300px;
    text-align: left;
}
</style>
```

However, because of bugs in several versions of Microsoft Explorer, it is also necessary to specify:

```
body
{
    margin: 0;
    padding: 0;
    text-align: center;
}
```

Note1: "margin: auto" means that the margin is the same on all sides.

Note2: Only using "text-align: center" does not work. It will only align text-lines, not arbitrary objects.

More information: <http://www.maxdesign.com.au/presentation/center/>



No.	Question in English	Question in Swedish	Max points
4	How can binary data be handled using XML? There are two main methods, which are they?	Hur kan man hantera binära data med XML? Det finns huvudsakligen två metoder, vilka är de?	6

Answer:

Encode binary in text format, for example using BASE64.

Put the binary in a separately downloaded file, and refer to it in the XML document, in the same way as images are handled in HTML.