

San Diego State University  
Imperial Valley Campus

MKTG 476  
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Marketing, Computers, and the Internet  
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## **SAMPLE FINAL—SAMPLE ANSWERS**

Note: On the actual exam, you will be given approximately one half page to answer each question. You do NOT need to bring a blue-book.

Please select any 8 of the following 10 questions to answer:

1. One issue in search engine optimization is the text contained on relevant pages. Please discuss strategies for search engine optimization based on text content.

In order to get a high ranking in a search engine, it is important that relevant terms—the terms that users are likely to use when searching on a search engine—be repeated in the text as much as possible. Search engines are sensitive to “spamming” attempts where the words are repeated without context, so the words must come legitimately in the text of the file. Bolding will make a word count more, and words early in the file will count more. Therefore, the words should be used in bolded headings and should be made to occur as frequently as they naturally can early in the document.

2. The appearance of web sites often differs between computers and web browsers—that is, a user with one setup may see something different from what a user with a different setup sees. Why does this occur and what are some possible remedies?

This occurs for several reasons. There are subtle differences in the way each browser displays a given code. Users may have set different options in the browser and may have different size screens or use part of the screen for a window. When a font used in the design is not available on the visitor’s computer, another font will be substituted. This font may look different and may have a different size, changing formatting. Using standard fonts common among most computers reduces this problem. Files can also be saved in PDF format, which preserves the font. Text can be saved as graphics on a web page, but this increases file size.

### 3. What is “*phishing*” and what are some possible remedies?

Phishing is a scheme where a user is enticed to go to an illegitimate web site to enter confidential information. The user may receive an e-mail with a hyperlink that looks like it points to a legitimate site. The user only sees the title part of the hyperlink, however, while the actual link contains another address. Some web browsers and e-mail systems warn users before going to an address that differs from the one displayed in the hyperlink. Firms can educate customers about these problems. It is also possible, if the phishing e-mail is discovered early, to send bogus information that will overwhelm the phishers. Web site hosts can be asked to take away the sites, but that usually takes longer.

### 4. What are some remedies for *spam*?

Individual users can use software to detect messages that appear to be spam. E-mail account hosts can also filter messages to remove those that are most likely to be spam. These methods are imperfect, however, since some spam messages will not be identified and some legitimate messages will incorrectly be classified as spam.

### 5. How do *flat* and *relational* databases differ?

“Flat” databases only contain single, unintegrated data collections that are not matched to other databases which contain common data. Relational databases, in contrast, can be integrated such that data in one can be used to identify data in another. For example, if the sales and employee databases both contain an employee ID number, a relational database can generate sales records for each employee.

### 6. One of the factors that appear to heavily influence search engine rankings of sites is their *popularity*. What can be done to help improve this popularity?

Popularity refers to the extent to which other sites which are highly ranked for the keywords in question feature links to the site. Sites that have links from highly rated sites are likely to get high search engine rankings. Links from lowly ranked sites do not help much. To improve ranking, then, it is useful to establish link exchanges with highly ranked site where each site features a link to the other.

### 7. Please discuss “anti-spam” algorithms used by *search engines*.

Anti-spam algorithms in search engines try to ensure that the site is based on legitimate content. They are designed to identify when key words appear to be repeated for repetition's sake rather than for a legitimate purpose, if “decoy” text is hidden in small fonts, invisible colors, or behind graphics, or if a site with relevant text features “redirection” to another site.

**8. Speed is an important issue in web site design. What are some tradeoffs for speed of a site?**

Since high resolution photos and extensive animation may take a great deal of bandwidth, web designers may have to choose whether they want fancy content or a site that comes up faster. This is especially important if a site is aimed at a country, area, or segment where users are likely to have slow Internet connections.

**9. What is a “denial of service attack,” and what are its typical effects?**

In a “Denial of Service” attack, one or more computer servers will be set to repeatedly send requests for the targeted server to “identify” itself. These requests for information will overwhelm the server so that it cannot accommodate most of the requests from other servers (such as sending a specific page). Denial of service attacks will usually overwhelm the targeted server so that its content cannot be accessed.

**10. Within the context of computer security, what are *Trojan horses*, and what are their implications?**

Trojan horses are innocent looking software programs that appear to perform a legitimate function but then infect the computer with a virus. This virus may do various forms of damage. It may damage hardware or software. More modern Trojans may also cause the computer to send data from the computer to some hacker who may then misuse it.