

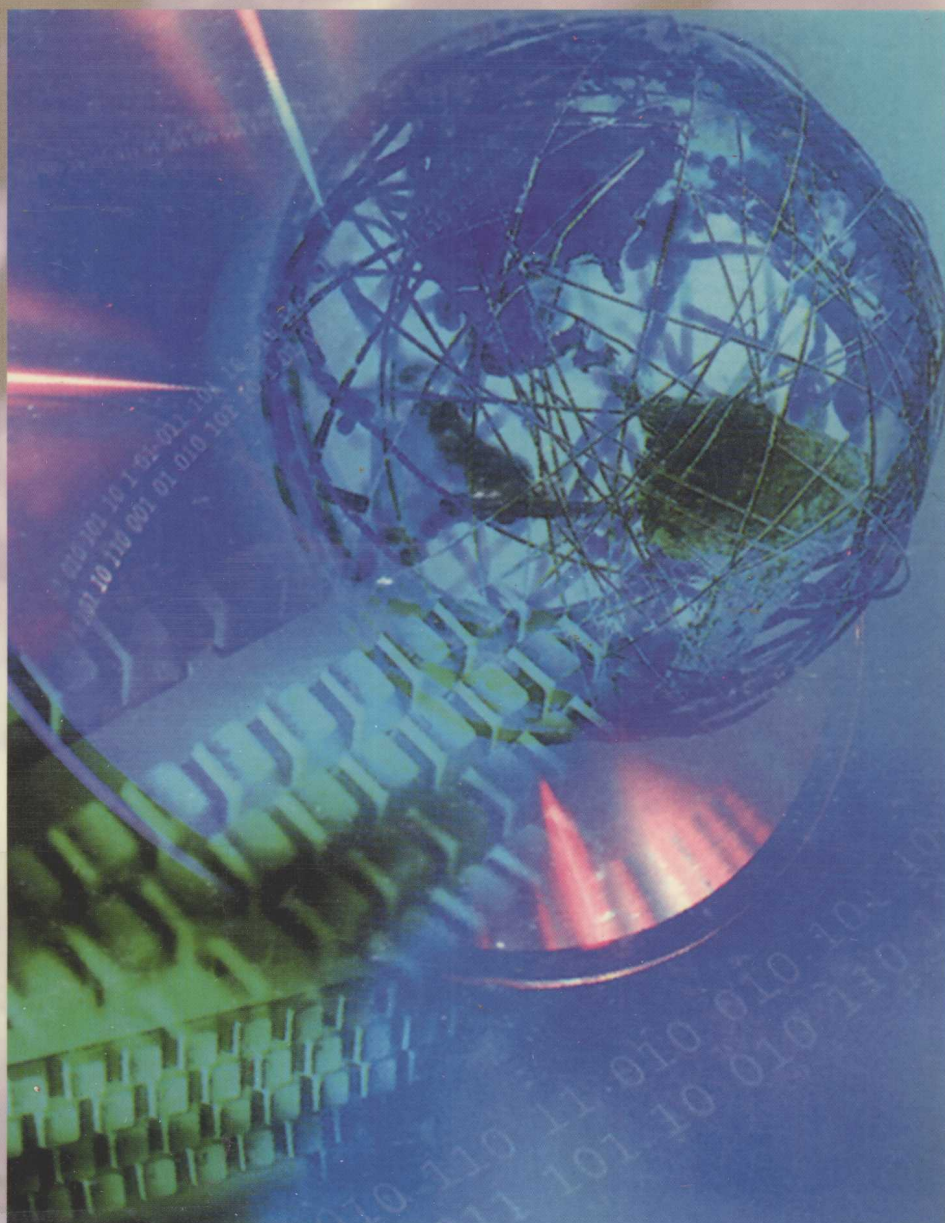
信息管理

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吴江华

专业英语



中国科学技术出版社

信息管理专业英语

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·北京·

内容简介

本书的内容涉及到信息管理专业的主要领域,包括信息管理与信息系统、图书馆学和档案学三个主要方面。全书共分 24 课,课文的内容分别选自信息管理领域的英文专著或文章,其中多数为近年来信息管理领域比较有影响或有代表性的思想和观点,使读者在掌握专业英语语言技能的同时,了解英美国本本专业领域的发展现状和趋势。每篇课文在编排内容上包括课文、词汇与表达方式、页末脚注、文后注释和课后练习等几个部分。书后附录中列有词汇表、短语和表达方式表。本书主要作为高等院校信息管理学院师生讲授和学习专业英语的教材使用,但亦有助于从事信息管理工作的各类专业人员提高英文专业文献的阅读能力。

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前 言

按照我国《大学英语教学大纲》(1998 年修订本)的要求,专业英语是大学英语教育的应用提高阶段,它是大学英语教学的一个重要组成部分,也是促进学生完成从学习过渡到实际应用的有效途径。《信息管理专业英语》这一教材的编写和出版,可为我国高等院校的信息管理学院提供有助于专业英语教学的系统教材,亦可为从事信息管理工作的各类专业人员提高英文专业文献的阅读能力打下一定的基础。

本书内容主要涉及到信息管理专业的主要领域,除少量文章属于传统的图书馆学和档案学领域之外,大多数文章都涉及到新近设置的信息管理与信息系统专业的主要内容。全书共分 24 课,分别选自信息管理与信息系统、图书馆学和档案学专业的英文专著或文章。各课的内容多数为近几年来信息管理领域比较有影响或有代表性的思想和观点,这使学生在掌握专业英语语言技能的同时,可以了解英美国家本专业领域的发展现状和趋势。在编排体例上,编者考虑到专业英语与大学基础英语之间的延续性,注意吸收国内优秀大学英语教材的编排特点,又照顾到信息管理专业英语在专业词汇和行文风格的特殊性。具体来说,每篇课文在编排内容上包括有课文、词汇与表达方式、页末脚注、文后注释和课后练习等几个部分。

迄今为止,有关信息管理专业的专业英语教材在全国可以说是寥寥无几,大多数高等院校所编写的此类教材都未加以正式出版。和同类教材相比,本教材的创新之处可归纳为以下三点:①系统性:该教材涉及到图书馆学、档案学和信息管理与信息系统三个领域,这在国内来讲,可以说是一次前所未有的尝试,这将有助于学生从信息管理的宽阔视野充分认识这些相关领域的国外发展情况,亦会使信息管理学院的学生在未来就业选择时有更为灵活的余地。②新颖性:从目前已经出版的信息管理方面的专业英语教材来看,即使是编写得比较好的教材,其所选文章多为 20 世纪 80 年代末及 90 年代初的文章,由于信息管理领域与信息技术(尤其是因特网技术)的紧密联系,显然这已不能充分反映国外最新发展水平和状况。本教材力图选入反映本学科领域发展的前沿状况和发展趋势。除非是经典著作,所选课文尽量为 1998 ~ 2001 年的最新文章,因而内容新颖成为该教材的一大特色。③独创性:专业英语的教学,除了应该注重专业术语和词汇的掌握之外,更应注重语言技能的培养。所以,在编排体例上,本教材在课后练习部分注重锻炼学生的英汉翻译技巧和英文文摘编写的能力,课后所选的短文一般与每篇课文的主题大致相近,以进一

步培养学生的阅读能力。这一做法可以使读者在熟练掌握课文内容的同时,还可掌握专业英语学习的技能和方法,还为信息管理院系的学生在走向社会之后独立阅读专业英语原文打下良好的基础。

本教材的成书,是集体智慧的结晶。中山大学信息科技学院副院长尚家尧副教授、中山大学信息管理系主任陈永生教授在编写过程中曾给予编者以莫大的鼓励和鞭策;中山大学信息科技学院图书分馆馆员叶楚璇同志、信息管理系技术员邓昭俊工程师以及信息管理系 96 级王静芬同学、99 级符永寿同学皆为本书的编写给予了许多帮助和支持。更值得一提的是,中山大学教学服务中心主任曾纪川副教授,为本教材的编写工作付出了许多的心血。在此,三位编者一并表示衷心的感谢。

由于时间仓促,再加上编者水平与经验有限,教材中难免有不妥之处。欢迎广大读者批评指正。

编 者

2001 年 8 月

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Unit 1

The Historical and Practical View of the Internet

Text

1 In the late 1960s the U.S. Department of Defense, and more specifically its Advanced Research Projects Agency (ARPA), created an experimental network connecting computers over telephone lines. This experimental network developed into ARPANet, which allowed scientists, researchers, and military personnel at diverse sites to communicate using electronic mail or through real-time conversations.

2 As ARPANet expanded, other networks with a limited focus were born. MILNet catered primarily to military personnel; NSFNet was for researchers and scientists working with the U.S. National Science Foundation; Bitnet for researchers and teachers at educational institutions around the world; and there were others. In the 1970s, ARPANet developed a protocol (a set of rules for communication) enabling other networks to connect to ARPANet. The Internet (internetwork system) was born in the early 1980s when other networks began to connect up to ARPANet, and it has grown rapidly in coverage and capabilities since that time.

Names and Addresses

3 To help navigation throughout the Internet, every host (site) computer has a unique address (a domain address), and every person using the Internet has a username and domain address, which refers to their host address. This enables people to send and receive messages over the Net; without a unique address, the messages would never get to the correct receiver.

4 Consider the address "smith@bus.emba.ugm.edu" for a moment. The username is "smith"; the domain name consists of everything after the @ sign, or "bus.emba.ugm.edu." Typically, the rightmost level of the domain

name indicates the type of organization (for those within the United States) or the country (for those outside of the United States). In this case, "edu" indicates an educational institution. The second one to the left might indicate the organization ("ugm" is the University of the Green Mountains), the third might be a department ("emba" or Engineering, Math and Business Administration), and the fourth a specific computer used by the department ("bus" is the imaginative name for the Business Administration computer). Domain names have as many segments as are required to uniquely identify the host computer.

5 In the United States, there are several types of suffix (ending) of the host domain name. Examples are:

.com	Commercial organizations
.edu	Educational institutions
.gov	Government organizations and departments

6 Organizations in countries other than the United States generally use a two-character suffix that indicates the country such as:

.au	Australia	.mx	Mexico
.ca	Canada	.pl	Poland
.jp	Japan	.ru	Russian Federation

Electronic Mail, Newsgroups, List Services

7 One common use of the Internet is electronic mail (E-mail), while newsgroups and listservs are also popular. With E-mail, you can send messages to, or receive messages from, any other person who has an Internet address. It is also possible to send messages to multiple individuals at the same time, providing the E-mail software on your host computer supports that feature.

8 E-mail works roughly like ordinary "snail mail" (postal service), in the sense that you compose a message and send it to an address; if the address you used was correct and there are no unforeseen problems in the delivery process, the message should be received. The major difference is that with E-mail, the message is composed and transmitted electronically (or through some compatible channel or combination of channels, such as microwave or satellite transmission). If you send a message to an incorrect address, it is usually returned with an error message attached, such as "hostname not found" or "username not valid for this host."

9 Mailing lists or list services (listservs) are established to distribute messages to individuals with a common interest, such as golfing or French cuisine.

Users can subscribe and unsubscribe to the listservs as they wish; membership is voluntary. When a member sends a message to the listserv, it is automatically distributed to everyone who has subscribed. If you belong to a listserv, all messages sent to the listserv will show up in your electronic mailbox.

10 Usenet newsgroups are also established for users with a common interest, but these work differently than listservs. You can think of a newsgroup as a forum for an electronic discussion; you can read the discussion that has taken place, and add your own opinions if you wish. The major difference from listservs is, instead of the messages coming to you, you go to the discussions. Newsgroups are similar to bulletin board systems (BBSs), special interest groups (SIGs) and electronic forums.

Telnet and FTP

11 Telnet is a feature (and an Internet command) allowing you to access computers that are connected to the Internet. Once connected, you become a client of the computer and it becomes the host. While connected, you can use the information located on the host computer, just as you can on your own computer. To establish a Telnet connection, you need to have an account on that computer. In addition, many computer sites allow you to log in as a guest in order to use some of the programs and information available.

12 Once you have connected to a host computer site, you may want to obtain copies of some of the programs or files stored at that site. Millions of files, stored on individual computers connected to the Internet, are free for the copying. These include shareware programs, books, maps, graphical images, sound bites, and much more. You can transfer the files from the host site to your computer using file transfer protocol, or ftp. Sometimes ftp sites are referred to as anonymous ftp sites, meaning that anyone is welcome to connect and get information.

13 Retrieving files using ftp requires you to first locate the file, and also to determine what type of file it is. Files may be stored in a variety of formats; the two most common are ASCII¹ (text) or binary. ASCII

¹ 美国信息交换标准代码 (ASCII)

(American Standard Code for Information Interchange) files can be produced or read by most common application software packages, such as WordPerfect or Excel, while binary files can only be read by the program used to create them. Sound files and graphic files and programs are usually stored in binary format. Files can also be compressed so that they require less space for storage and are easier to transmit. Copying a compressed file, however, requires that it be decompressed before it can be used.

Gopher, Archie, and Veronica

14 Before you can copy a file you need to find it, and finding files on the Internet is generally easier said than done. To help users locate files, numerous utility programs have been developed. One of these is gopher, which is a menu-based system that allows the user to search Internet sites for everything from weather reports to jokes. The gopher utility "goes for" the information you have requested from a gopher site.

15 As the number of gopher sites increased around the world, it became more and more difficult to locate and access them. To help address this problem, researchers at the University of Nevada developed veronica, which some people claim stands for "very easy rodent-oriented netwide index to computerized archives." Veronica is basically an extension to gopher; it searches the titles of files in gopher servers around the world, and creates an index. Through a gopher menu choice that accesses veronica, you can then perform a keyword search on this index.

16 Another utility program that helps locate files is named archie. The archie program, developed at McGill University in the early 1990s, is designed to catalog all ftp files available on the Internet. Archie logs in to virtually all ftp sites, scans the list of ftp files, and then updates an indexed database. The database contains information such as the filename, file size, type (i.e., binary or ASCII), and a brief description.

Wide Area Information Server (WAIS)¹

17 Archie and veronica do a good job of searching indexes of ftp sites and "gopherspace" for titles, but they don't search the contents of documents

¹ 广域信息服务系统 (WAIS)

(files) within databases. There is a utility program, however, that does. When you give wide area information server (WAIS) a word or words to look for, it searches through WAIS server databases connected to the Internet for documents containing the search parameters (key words).

18 WAIS arose through a combined effort of three companies: Apple Computer, Dow Jones, and Thinking Machines Corporation. WAIS is supported by librarians and follows a standard defined by the American National Standards Institute¹ (ANSI). This ensures that common standards will be applied when documents are indexed, making retrieval more consistent. In addition to simple keyword searches, WAIS allows you to enter multiple words, as well as logical operators (such as and, or, and not). The WAIS indexing and retrieval standard can be applied to many things besides text, such as graphical images and sounds.

19 Not all databases connected to the Internet are indexed according to WAIS standards, which means that a search using WAIS will only include a subset of Internet databases. For those sites that are WAIS-indexed, however, it provides a powerful tool for locating and retrieving information. Assume, for example, that you want to search for articles containing the word *Newtonian*. WAIS consults the indexes of the WAIS databases you specify to satisfy your search request; the indexes point to the database items (the source documents) containing that word. When an article is located, its title is displayed on your screen. If you desire, you can then review the article.

Interactive Activities

20 To this point we have only discussed one-way interactions on the Net; sending mail, accessing databases, retrieving images of weather maps, and so on. The Internet can also be used for interactive activities, which many people view as a major opportunity for future applications.

21 There are several ways to interact with other people on the Net in a real-time environment. You can use a Chat feature, which enables you to carry on an open discussion with multiple people on a channel. You can also establish a link to one other person and use Talk to carry on a conversation. Both Talk and Chat are really interactive electronic mail, instead of sending

¹ 美国国家标准协会 (ANSI)

messages that wait in "mailboxes" to be retrieved, users type messages back and forth in a real-time setting. Note, however, that these are text messages and not the sound of a person's voice.

22 The introduction of software and hardware to carry on voice conversations over the Net has expanded possible uses significantly.

Although users experience problems with the quality of the sound over some telecommunication lines, and can experience delays over long distances, the introduction of voice conversations over the Net has provided a low-cost alternative to public telephone utilities. If two users (say one in Hong Kong and the other in Atlanta) both have the appropriate software and hardware, and they establish a link over the Net, they are able to speak to each other without paying the long-distance fees. The further addition of real-time video transmission has expanded the information content of conversations from sound-only to sound and video, providing the capability of using the Net for personal videoconferencing.

23 Another form of interactive activity on the Net is the ever-expanding area of interactive games and entertainment. There are a multitude of games being played on the Net at all times. These range from simple two-person, information-sparse settings such as chess matches, to multi-user, multidimensional, information-rich environments such as dungeon games. As the technical capabilities of the Net continue to expand – addition of three-dimensional imaging to full-motion video, for example – the quality and sophistication of the games and other interactive activities continues to increase.

Conclusion

24 The potential for the Internet seems unlimited, and the growth in the number of sites, the number of users, and the amount of material is truly incredible. But quantity and quality are two very different concepts. On the downside, although there is more material available every day, some critics charge that most of it is at best interesting to a very small number of people and at worst totally useless – what some people call *cyberdreck*. Individual home pages are cluttered with pictures of favorite pets or toilets, newsgroup discussions are dominated by individuals who are poorly informed of the issues they are attempting to discuss, and some initial attempts at commercial use are clumsy and almost embarrassing for both the user and the advertiser.

25 Some early Net users argued that the Internet should be totally independent, with no commercial use. Others argued that without the development and use of systems for payment of services, the quality of material will only continue to decline. As systems are developed where users are required to pay to access material, they soon discover what is worthwhile and what isn't. The useful material will grow and flourish, the successful applications will expand and prosper. The less useful material (which no one is willing to pay for), will simply sit on the Net like a book that no one ever looks up or uses.

26 It looks like the second argument has won. For the Internet to expand, flourish, and provide its many potential benefits, commercial applications are necessary. Furthermore, attempts to rigidly control the content of everything on the Internet would unnecessarily restrict its development, and would prove virtually impossible to police. As with other means of communication in our society (such as television), certain abuses will undoubtedly occur. With a larger percentage of society tapping into the Net, however, society's norms should begin to relegate the abuses to lesser roles.

Notes on the Text

*This text is adapted from **Information Technology and Management** edited by William L. Cats-Baril and Ronald L. Thompson, published by McGraw-Hill Companies, Inc. in 1997. Both authors are Associate Professors of the School of Business Administration at University of Vermont in the USA.*

New Words

real - time /'riəl'taim/
 protocol /'prəʊtəkəl/
 coverage /'kʌvərɪdʒ/
 capability /ˌkeɪpə'bɪləti/
 domain /dəu'mein/
 typically /'tɪpɪkli/
 rightmost /'raɪtməʊst/
 suffix /'sʌfɪks/
 newsgroup /'nju:zgru:p/
 listserv /'lɪst'sɜ:v/
 unforesee /ˌʌnfə'si:/

(unforesaw, unforeseen)

a. 实时的
 n. 协议
 n. 覆盖范围; 覆盖程度
 n. (常用复)特性; 性能
 n. 领域; 范围
 adv. 典型地; 一般来说
 adj. 最右边的; 最后面的
 n. 词尾; 后缀
 n. 新闻组
 n. 邮件列表
 vt. 不可预见; 未预料到

compatible /kəm'pætəbl/	adj.	相容的;兼容的
microwave /'maɪkrəweɪv/	n.	微波
golfing /'gɒlfɪŋ/	n.	高尔夫运动
cuisine /kwi'zi:n/	n.	烹调;烹饪
telnet /'telnet/	n.	远程登录
shareware /'ʃeə'weə/	n.	共享软件
graphical /'græfɪkl/	a.	图形的;图表的
anonymous /ə'nɒnɪməs/	a.	匿名的;未署名的;无名的
binary /'baɪnəm'/	n. & adj.	二进制的
compress /kəm'pres/	vt.	压缩
decompress /di:kəm'pres/	vt.	解压
server /'sɜ:və/	n.	服务器
parameter /pə'ræmɪtə(r)/	n.	参数;参量
retrieval /ri'tri:vəl/	n.	查找;检索
interactive /ɪntə'æktɪv/	a.	互动的;交互的
interact (with sb.) /ɪntər'ækt/	vi.	与...相互影响或交流
telecommunication /telɪkəmju:nɪ'keɪfɪnz/	n.	远程通讯;电讯
videoconferencing /'vɪdiəu'kɒnfərənsɪŋ/	n.	电视会议
sparse /spa:s/	adj.	稀少的;缺乏的
dungeon /'dʌndʒən/	n.	地牢(尤指城堡中者)
sophistication /sə'fɪstɪ'keɪfɪn/	n.	复杂(性);精密(性)
charge /tʃɑ:dʒ/	vt.	(文)声称;断言
clutter /'klʌtə(r)/	vt.	胡乱地填满;充斥着
embarrassing /ɪm'bærəsɪŋ/	adj.	令人困窘的
prosper /'prɒpə(r)/	vi.	繁荣;壮大
police /pə'li:s/	vi.	维护;监督
norm /nɔ:m/	n.	标准;规范
relegate /'relɪgeɪt/	vt.	将...降级;将...降低地位

Phrases and Expressions

host computer	主机
domain address	域址
domain name	域名
electronic mailbox	电子邮箱
bulletin board system (BBS)	电子公告版
special interest group (SIG)	专门兴趣组

file transfer protocol (FTP)

a multitude of sth.

on the downside

at best

at worst

文件传输协议

大量的;许多的

从另一方面说;

从消极的方面讲

充其量;从最好的方面看

从最坏的方面看

Exercises

I. Answer the following questions according to the text:

1. What is the predecessor of the Internet? When was it first created?
2. How many categories of suffix of the host domain name are there in the United States? What are they?
3. What is the major difference between listservs and newsgroups?
4. What do you need to establish a Telnet connection with other computers that are connected to the Internet? What benefits can you get from a Telnet connection?
5. What are the two most common formats to store files in computers? What are the differences between them?
6. What are archie and veronica good at, and what are they not good at?
7. What is the function of WAIS?
8. Can you name a few activities which are one-way interactions on the Net? Also, what are interactive activities on the Net? Do you conduct any of them yourself?
9. What does the word *cyberdreck* (in para. 24) mean?
10. What is the main idea of this article?

II. Read the following passages and translate the underlined sentences into Chinese:

The World Wide Web as we know it today is the culmination of many strands of technological development which has fundamentally and quite literally changed the way the world looks at information ←. Its origins can be traced back as far as 1945 when Vannevar Bush published "As We May Think" (Atlantic Monthly, July 1945) in which he prophesied a future work desk built upon hyperlinked

hypermedia. In 1960, Theodor Nelson conceived the idea of hypertext and began his long-running Xanadu project, an attempt to create a worldwide network using hypertext links. In the 1980s, Tim Berners-Lee drew on these ideas and conceived the World Wide Web when he set out to create a personal organizer using hypertext links. His ideas spawned the creation in the mid 1990s of graphical user interfaces (GUI) (图形用户界面) in the form of the web browser (Mosaic, Netscape, and Internet Explorer) which catapulted (促使) the Internet from relative obscurity into the commercial arena, in the process revolutionizing the way we handle information. Businesses began to make use of browser technology to publish information such as product information. This same technology, however, provided a cheap and platform-independent tool for publishing information within the company, and the corporate intranet was conceived. As this idea matured, it was a small step to allow third parties limited and controlled access to the corporate intranet, and so the extranet was born.

The real significance of the web is neatly explained in Robert H Reid's *Architects of the Web: 1,000 Days that Built the Future of Business* (New York: John Wiley, 1997). This tasty concoction of technical explanation, business analysis, and biography emphasized that the key issue is not how to do things on the web but how to use the web to do things differently ↑. It is a compelling read which tells the story of how research student, Marc Andreessen, set out to make something cool out of Tim Berners-Lee's fledgling World Wide Web and in little more than two years gave the world Netscape. One of Andreessen's colleagues remarked that it was "quite scary to think that just a couple of people could influence so many without really intending to." Reid counters that it might have been scarier had they actually planned it! They might not have planned it, but the harnessing of web technologies is now very much a part of business planning and strategy. Or, in Reid's words, "The hissing infiltration of the Internet's open protocols and rules of engagement has already shifted the landscape of the technology industry beyond recognition. It has also given rise to one of the most dramatic successes in business history, and is building a network that will soon extend into every major organization in the world, fundamentally changing the way businesses, individuals, and perhaps even nations mind their affairs and deal with one another."

Even in 1996, Netscape CEO James Barksdale knew that the real game was not so much about the creation of web browsers as about getting businesses to use web-based products to create client-server cross-platform solutions. He had no

doubt that the next big thing would be extranets – the ability to use the same software for collaborating and communicating outside the firewall as inside the firewall, with your partners and your customers. Three years later, the *Extranet Strategist* confirmed the accuracy of his prediction: “Extranets are not a passing trend; they are part of the larger e-business future. Companies that want to remain leaders in their industry will have to make IT investments in extranet solutions that facilitate resource sharing with their partners and customers”. Of course the electronic exchange of information is not new, but hitherto has been based on proprietary networks and standards. Companies can now exploit their investment in intranet and Internet technology (which is open rather than proprietary) to exchange data and share applications with business partners, suppliers, and customers. Provided they are secure, extranets enable organizations to control who sees or uses what, and as a result, they give companies the control they need to share information and gain a competitive edge→.

(Notes: These passages are selected from an article entitled “Extranets: What’s the Fuss?”, published in *Information Outlook*, February 2000. The author is Ian Watson, Information Services Manager at Scottish Media Newspapers, Glasgow, UK.)

III. Choose the most appropriate answers according to the above passages:

1. According to the author, what is the influence of the World Wide Web?
 - (a) It has changed the way we look at information.
 - (b) It has changed the way we store information.
 - (c) It has changed the way we handle information.
 - (d) It has changed the way we retrieve information.
2. What technology has caused the emergence of the corporate intranet?
 - (a) Graphic User Interfaces.
 - (b) server technology.
 - (c) browser technology.
 - (d) All of the above.