

## *Section Two: Further Reading*

### *Personal Computers*

*In 1981, IBM introduced its IBM PC and it legitimized the personal computer as a business tool.*

*Shortly after that, other manufacturers began making PCs that were 100% compatible with the IBM PC; that is, they basically worked like an IBM PC.*

*Most of today's personal computers (over 80%) evolved from these original PC-compatibles.*

*Long removed from the IBM PC, they are also called Wintel PCs because they use the Microsoft Windows 9x/NT/2000 (a collective reference to Microsoft Windows 95, Windows 98, Windows NT; or Windows 2000) control software and an Intel-Corporation or Intel-Compatible processor.*

*Each of the Microsoft Windows 9x/NT/2000 family of operating systems controls all hardware and software activities on Wintel PCs.*

*The Wintel PC represents the dominant PC platform.*

*A platform defines a standard for which software is developed.*

## ***Conventional PCs: Pockets, Laptops, Desktops, and Towers***

*Conventional personal computers have a full keyboard, a monitor, and can function as stand-alone systems.*

*These PCs can be categorized as pocket PCs, laptop PCs, desktop PCs, and tower PCs.*

*Pocket and Laptop PCs.*

*Pocket PCs and laptop PCs are*

*light (a few ounces to about eight pounds), compact, and are called 'portable' because they have batteries and can operate with or without an external power source.*

*The pocket PC, sometimes called a palmtop PC, literally can fit in a coat pocket or a handbag.*

*Laptops, which weigh from three to eight pounds, often are called notebook PCs because they are about the size of a one-inch-thick notebook.*

*The power of a PC may not be related to its size.*

*A few laptop PCs can run circles around some tower PCs.*

*Some user conveniences, however, must be sacrificed to achieve portability.*

*For instance, input devices, such as keyboards and point-and-draw devices, are given less space in portable PCs and may be more cumbersome to use.*

*This is particularly true of pocket PCs, in which miniaturized keyboards make data entry and interaction with the computer difficult and slow.*

*The display screen on some pocket PCs is monochrome and may be difficult to read under certain lighting situations.*

*Portable computers take up less space and, therefore, have a smaller capacity for permanent storage of data and programs.*

*Laptop battery life can be as little as a couple of hours for older models to 20 hours for state-of-the-art rechargeable lithium batteries.*

*The 2-in-1 PC can be used as both a notebook and a desktop PC.*

*It has two parts: a fully functional notebook PC and a docking station. Two-in-one PCs have a configuration that allows users to enjoy the best of both worlds - portability and the expanded features of a desktop.*

*The notebook, which supplies the processor, is simply inserted into or removed from the docking station, depending on the needs of the user.*

*The docking station can be configured to give the docked notebook PC the look and feel of a desktop PC.*

*That is, the docking station can expand the notebook's capabilities and might include more disk storage, a CD-ROM drive, several interchangeable disk options, a full-size keyboard, a large monitor, and expansion slots into which still other features can be added to the system (for example, circuitry that would enable television programming to be viewed on the PC's monitor).*

*Usually, docking stations provide a direct link to the corporate network.*

*Another notebook option, called the port replicator, works like the docking station in that the notebook PC is inserted into it and removed as needed.*

*Once inserted the notebook can use the port replicator ports and whatever is connected to them.*

*Ports are electronic interfaces through which devices like the keyboard, monitor, mouse, printer, and so on are connected.*

*Port replicators also provide bigger speakers and an AC power source, and some include a network connector.*

*Desktop and Tower PCs. Desktop PCs and tower PCs are not considered portable because they rely on an outside power source and are not designed for frequent movement. Typically, the desktop PC's monitor is positioned on top of the processing component.*

*The processing component of the tower PC is designed to sit upright, like a desktop PC's processing component standing on its end.*

*The taller towers (over two feet) are usually placed beside or under a desk, and the smaller mini-tower may be placed in any convenient location (on a nearby shelf on the desk, or on the floor).*

*Of the two, the tower has emerged as the most popular, primarily because it has a smaller footprint (the surface space used by the unit).*

*The laptop which costs about twice that of a comparable tower PC, is gaining ground. About one in three PCs sold are laptops.*

## ***The Extended PC Family: Slate PCs, PDAs, and NCs***

*The conventional members of the PC family have several unconventional cousins.*

*These personal computers may be designed for special applications or for use in a particular computing environment.*

*Slate Computers. Mobile workers in increasing numbers are using portable slate PCs.*

*Slate PCs, sometimes called pen-based PCs, use electronic pens in conjunction with a combination monitor/drawing pad instead of keyboards.*

*Users select options, enter data, and draw with the pen.*

*United Parcel Service (UPS) couriers use state PCs when they ask you to sign for packages on a pressure-sensitive display screen with an electronic stylus.*

*Slate computers are poised to make an entry into the world of many mobile professionals.*

*Handwritten text is interpreted by handwriting-recognition software, then entered into the system.*

*Speech-recognition software, which allows the user to enter spoken words into the system, is being integrated into high-end slate PCs.*

*Insurance agents and claims adjusters who need to work at accident or disaster scenes have found slate computers more suitable to their input needs, which may include both text and drawings.*

*Personal Digital Assistants. Personal digital assistants (PDAs), or handheld PCs, may take on many forms and are called by many names, from connected organizers to personal communicators to mobile business centers to Web phones.*

*PDAs are smaller than slate PCs, usually weighing less than half a pound. They can include a built-in cellular phone that enables the wireless sending /receiving of faxes and access to the Internet (including e-mail).*

*Their built-in wireless communications capabilities give their users immediate access to the Internet, colleagues and clients, and needed information, virtually anytime, anywhere.*

*PDA interaction can be via the pen (like a slate PC) or by touching the keys on an on-screen keyboard or a reduced-key keyboard.*

*Generally, PDAs support a variety of personal information management systems.*

*A PIM might include appointment scheduling and calendar, e-mail, fax, phone-number administration, to-do lists, tickler files, 'Post-it' notes, diaries, and so on.*

*Some PDAs can support a variety of PC-type applications, such as spreadsheets and personal financial management.*

*Also, PDAs are designed to be easily connected to other computers and printers for data transfer, network access, and printing.*

*Network Computers. In contrast to the conventional PC, the network computer, or NC, is designed to function only when it is linked to a server computer (normally an organization's internal network of computers).*

*The NC looks similar to a PC but with several major configuration differences.*

*First, it has a relatively small processor and considerably less RAM than modern personal computers.*

*Second, it does not have a permanently installed disc. And, of course, it is less expensive than a stand-alone PC.*

## ***Workstations: The Hot Rods of Computing***

*What looks like a PC but isn't? It's a workstation and it's very fast.*

*Speed is one of the characteristics that distinguishes workstations from PCs.*

*In fact, some people talk of workstations as 'souped-up' PCs.*

*The PC was fine for word processing, spreadsheets, and games, but for real 'power users' engineers doing computer-aided design, or CAD (using the computer in the design process), scientists and researchers who do a lot of 'number crunching', graphics designers, multimedia content developers, and so on - the PC sometimes falls short.*

*The workstation's input/output devices also set it apart from a PC.*

*A typical workstation will sport a large-screen color monitor capable of displaying high-resolution graphics. Resolution refers to the clarity of the image on the monitor's display.*

*For pointing and drawing, the workstation user can call on a variety of specialized point-and-draw devices that combine the precision of a gun sight with the convenience of a mouse.*

*Add-on keypads can expand the number of specialized function keys available to the user.*

*(Larry & Nancy Long: pp. 18-25)*

# Comprehension Exercises

**A. Choose a, b, c, or d which best completes each item.**

*1. Which statement is NOT true?*

- a. IBM PC was introduced and legitimized in 1981.*
- b. Wintel PC is a personal computer using a Microsoft Windows operating system in conjunction with an Intel or Intel-Compatible micro-processor.*
- c. PCs made by other manufacturers were not wholly compatible with the IBM PC.*
- d. Most of today's personal computers have evolved from the original PC-compatibles.*

2. *A 2-in-1 PC is in two parts, a fully functional notebook PC and . . . .*

*a . a slate*

*b. a port hole*

*c. a runway*

*d. a docking station*

3. *We may infer from the text that the docking station*

...

*a. is a device into which a notebook PC is inserted to give the notebook PC expanded capabilities*

*b. is burdensome and reduces the capabilities of the PC*

*c. can give the notebook PC, the configuration of a desktop PC but does not allow the expanded features of a desktop*

*d. may not provide a direct link to the corporate network*

4. Which statement is *NOT* true?

- a. *Personal digital assistants are handheld personal computers that support a variety of personal information systems.*
- b. *Slate PCs enable input via an electronic pen in conjunction with a pressure-sensitive monitor/drawing surface.*
- c. *Network computers have high permanent storage capacity and are designed to work with a server computer.*
- d. *Network computers, in contrast to the conventional PCs, do not function unless they are connected to servers.*

5. *We may conclude from the text that a workstation is . . .*
- a. a large computer that can service many users simultaneously in support of enterprise-wide applications*
  - b. a high-performance single-user computer system with sophisticated input/output devices that can be easily networked with other workstations or computers*
  - c. a television-like display for soft-copy output in a computer system*
  - d. an output peripheral device that can project the screen image on a large screen for group viewing*

## B. Write the answers to the following questions in the spaces provided.

1. What determines the power of a computer?
2. What controls the hardware and software activities on Wintel PCs?
3. Explain the platform.
4. What distinguishes the port replicator from the docking station?
5. What are ports?

## Section Three: Translation Activities

### A. Translate the following passage into Persian.

#### Groceries Online

*'Smart Shopping for Busy People' is Peapod's slogan. Peapod, a grocer on the Internet, has made life easier for a great many people. Although Peapod is not yet national in scope, it is giving us a glimpse into the future of retailing-the virtual store. Peapod is a pioneer in a rapidly expanding industry that is dedicated to enabling us to buy almost anything from our PCs.*

*Peapod subscribers go shopping at the virtual grocery store by logging on to the Peapod site on the Internet. Once online, they can shop interactively for grocery items, including fresh produce, deli, bakery, meat, and frozen products. Rather than running from aisle to aisle, you simply point and click around the screen for the items you want.*

*Peapod's online shopping system is linked directly to its partner stores' computer systems (for example, Safeway in San Francisco and Jewel in Chicago).*

*transmitted to the nearest partner store. A professionally trained shopper takes your order, grabs a shopping cart, and does your shopping for you. The professional shopper takes a fraction of the time you would take because the list is ordered by aisle and the shopper knows exactly what to get. You can redeem your coupons when the shopper/delivery person arrives with your food. This is one of many interactive online approaches to shopping that can help take the hassle out of shopping.*

B. Find the Persian equivalents of the following terms and expressions and write them in the spaces provided

1. *competency*

2. *computer-aided design*

3. *configure*

4. *controversial*

5. *desktop PC*

6. *docking station*

7. *footprint*

8. *handheld PC*

9. *information society*

10. *information technology*

11. *knowledge worker*

12. *laptop PC*

13. *masterfile*

14. *network computer*

15. *notebook PC*

16. *operating system*

17. *palmtop PC*

18. *pen-based PC*

19. *personal digital assistant*
20. *personal information management*
21. *pocketPC*
22. *point-and-draw device*
23. *port replication*
24. *pressure-sensitive display*
25. *record*
26. *reduced-key keyboard*
27. *representation*
28. *resolution*
29. *slate PC*
30. *speech-recognition software*
31. *stand-alone PC*
32. *stylus*
33. *tower PC*
34. *united parcel device*
35. *Web phone*
36. *workstation*