

# 大同大學 九十四 學年度研究所碩士在職班入學考試試題

考試科目：計算機概論

所別：資訊經營研究所

第 1/5 頁

註：本次考試 不可以參考自己的書籍及筆記； 不可以使用字典； 不可以使用計算器。

I. (70%) MULTIPLE CHOICES: Select the best answer.

1. As computers become more a part of daily living, many people believe that \_\_\_\_ is/are vital to success.  
a. computer programming b. computer literacy c. computer repair d. computer hardware
2. A computing phrase ?known as \_\_\_\_?points out that the accuracy of a computer's output depends on the accuracy of the input.  
a. what you see is what you get b. garbage in, garbage out c. nothing ventured, nothing gained d. better safe than sorry
3. Sharing resources on a network \_\_\_\_.  
a. saves time and money b. saves time but wastes money c. wastes time but saves money d. wastes time and money
4. People around the world use the Internet to \_\_\_\_.  
a. communicate with and meet other people b. shop for goods and services c. access sources of information and leisure d. all of the above
5. When a user tells the computer to start a program, the computer places, or \_\_\_\_, the program into its memory from storage (either the hard disk or the program disc).  
a. runs b. installs c. loads d. executes
6. Software today has a better \_\_\_\_ than before.  
a. command-line interface b. graphical user interface c. menu-driven interface d. coded-row interface
7. A computer's \_\_\_\_ determine the category it best fits.  
a. size and speed b. processing powe c. price d. all of the above
8. All of the following companies sell PC-compatible computers except \_\_\_\_.  
a. Apple b. Dell c. Gateway d. Toshiba
9. An expensive, powerful desktop computer is the \_\_\_\_, which is geared for work that requires intense calculations and graphics capabilities.  
a. Tablet PC b. workstation c. mainframe d. PDA
10. \_\_\_\_ are capable of processing more than 12.3 trillion instructions in a single second.  
a. Desktop computers b. Notebook computers c. Midrange servers d. Supercomputers
11. \_\_\_\_ comprise an information processing system.  
a. Hardware and software b. Data and people c. Procedures d. all of the above
12. The \_\_\_\_ is an example of an Internet appliance.  
a. set-top box b. midrange server c. PDA d. supercomputer
13. Many small office/home office users (SOHO) are entering the \_\_\_\_ arena and conduct business on the Web.  
a. e-commerce b. multimedia c. e-transit d. multidimensional
14. Many large businesses have \_\_\_\_ software, which allows the company to provide a personalized touch and customized service to its customers.  
a. computer-aided manufacturing (CAM) b. desktop publishing (DTP) c. customer relationship management (CRM) d. Web-based training (WBT)
15. The Internet has its roots in \_\_\_\_, a network that became functional in 1969, linking scientific and academic researchers across the United States.  
a. ARPANET b. NSFnet c. LISTSERV d. MPEG
16. \_\_\_\_ occurs when one consumer sells directly to another consumer, such as in an online auction.  
a. Consumer-to-business (C2B) e-commerce b. Business-to-consumer (B2C) e-commerce  
c. Consumer-to-consumer (C2C) e-commerce d. Business-to-business (B2B) e-commerce
17. In an Internet e-mail address, a(n) \_\_\_\_ symbol separates the user name from the domain name.  
a. & (ampersand) b. @ (at) c. \* (asterisk) d. ~ (tilde)
18. \_\_\_\_ is a communications technology used by some outgoing mail servers.  
a. SMTP (simple mail transfer protocol) b. ARPA (advanced rural postal addresses) c. POP (post office protocol) d. HTML (hypertext mail link)
19. Widely used Web browsers for personal computers include all of the following except \_\_\_\_.  
a. Netscape b. Microsoft Internet Explorer c. Mozilla d. Microsoft PowerPoint
20. In a Web address, the \_\_\_\_, is a set of rules the defines how pages transfer on the Web.  
a. html, which stands for Hypertext Markup Language b. www, which stands for World Wide Web  
c. http, which stands for Hypertext Transfer Protocol d. url, which stands for Uniform Resource Locator
21. An advocacy Web site \_\_\_\_.  
a. contains content that promotes or sells products or services  
b. offers exciting, challenging avenues for formal and informal teaching and learning  
c. contains content that describes a cause, opinion, or idea  
d. is maintained by a private individual or family who normally is not associated with any organization

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22. Of the graphics formats that exist on the Web, the two more common are \_\_\_\_\_ formats because of their smaller file sizes.  
a. TIFF and BMP b. TIFF and PCX c. BMP and PCX d. JPEG and GIF
23. The \_\_\_\_\_ defines a popular video compression standard.  
a. Moving Pictures Experts Group (MPEG) b. Advanced Research Projects Agency (ARPA)  
c. National Science Foundation (NSF) d. Digital Subscriber Line (DSL)
24. \_\_\_\_\_ is an unsolicited e-mail message or newsgroup posting sent to many recipients or newsgroups at once.  
a. An emoticon b. Spam c. A flame d. FAQ
25. All of the following are rules of netiquette except \_\_\_\_\_.  
a. be polite and avoid offensive language b. keep messages brief and use proper grammar and spelling  
c. be careful when using sarcasm and humor d. use all capital letters
26. \_\_\_\_\_ is copyrighted software that is distributed free for a trial period.  
a. Shareware b. Custom software c. Packaged software d. Public-domain software
27. A \_\_\_\_\_ is a special window that provides information, presents available options, or requests a response.  
a. command box b. shortcut menu c. dialog box d. submenu
28. A feature of word processing software called \_\_\_\_\_ allows users to type words in a paragraph continually without pressing the ENTER key at the end of each line.  
a. replace b. search c. wordwrap d. collaboration
29. A template is a \_\_\_\_\_.  
a. document that contains the formatting necessary for a specific document type  
b. sequence of keystrokes and instructions that a user records and saves  
c. small image on the screen that represents a program or document  
d. collection of drawings, diagrams, and photographs that can be inserted into a document
30. When using spreadsheet software, each worksheet typically has \_\_\_\_\_.  
a. 56 columns and 536 rows b. 536 columns and 56 rows c. 256 columns and 65,536 rows d. 65,536 columns and 256 rows
31. \_\_\_\_\_ is the delivery of education at one location while the learning takes place at other locations.  
a. Extended training (ET) b. Faraway schooling (FS) c. Remote teaching (RT) d. Distance learning (DL)
32. As computers have become more sophisticated, programming languages have become more \_\_\_\_\_.  
a. cryptic b. user-friendly c. wordy d. error-prone
33. In the machine cycle steps, the term \_\_\_\_\_ refers to the process of translating instructions into signals the computer can carry out.  
a. fetching b. decoding c. executing d. storing
34. With a \_\_\_\_\_, the new processor chip is stacked on top of the old one.  
a. zero-insertion force upgrade b. chip-for-chip upgrade c. piggyback upgrade d. daughterboard upgrade
35. \_\_\_\_\_ is the most common type of volatile memory.  
a. ROM b. Flash memory c. CMOS d. RAM
36. Bluetooth's technology is \_\_\_\_\_.  
a. similar to a USB port in that it can connect multiple types of devices that require faster data transmission speeds  
b. a special high-speed parallel port that allows users to attach peripherals such as disk drives and printers  
c. a special type of serial port that connects the system unit to a musical instrument  
d. an alternative to IrDA that uses radio waves to transmit data between two devices
37. The USB (universal serial bus) and FireWire bus are \_\_\_\_\_.  
a. the most common and slowest expansion buses  
b. buses designed to improve the speed with which 3-D graphics and video transmit  
c. high-speed expansion buses that connect higher speed devices such as hard disks  
d. buses that eliminate the need to install cards into expansion slots
38. Flat panel monitors and LCD screens produce color using either \_\_\_\_\_ technology.  
a. CRT or gas plasma b. impact or nonimpact c. ink-jet or dot-matrix d. passive matrix or active matrix
39. All of the following usually use portrait orientation except \_\_\_\_\_.  
a. spreadsheets b. letters c. reports d. books
40. Two commonly used types of impact printers are \_\_\_\_\_.  
a. ink-jet printers and laser printers b. dot-matrix printers and line printers  
c. photo printers and large-format printers d. portable printers and thermal printers

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41. Printer resolution is measured by the number of \_\_\_\_ a printer can output.  
a. dots per inch (dpi) b. characters per inch (cpi) c. pixels per inch (ppi) d. bits per inch (bpi)
42. Examples of nonvolatile storage media include all of the following except \_\_\_\_.  
a. memory b. floppy disks c. microfiche d. PC Cards
43. A typical CD-ROM holds from 650 MB to 1 GB of data, instructions, and information, which is equivalent to about \_\_\_\_ high-density 3.5-inch floppy disks.  
a. 4.5 b. 45 c. 450 d. 4500
44. A storage technique that a DVD-ROM can use to achieve a higher storage capacity than a CD-ROM is to \_\_\_\_.  
a. make the disc more dense by packing the pits closer together b. use two layers of pits c. be double-sided d. all of the above
45. The use of microfilm and microfiche provides all of the following advantages except \_\_\_\_.  
a. they greatly reduce the amount of paper firms must hand b. they are inexpensive  
c. they have the longest life of any storage media d. they can be read without a microfilm or microfiche reader
46. A cross-platform program is one that has \_\_\_\_ on multiple operating systems.  
a. one version and runs identically b. one version and runs differently  
c. multiple versions, and each version runs identically d. multiple versions, and each version runs differently
47. With a \_\_\_\_, users interact with menus and visual images such as icons, buttons, and other objects to issue commands.  
a. command-line interface b. menu-driven interface c. performance-monitor interface d. graphical user interface (GUI)
48. A(n) \_\_\_\_ is a communications line between a device and the processor.  
a. disk operating system line (DOS) b. preemptive multitasking line (PMT) c. interrupt request line (IRQ) d. fault-tolerant computer line (FTC)
49. \_\_\_\_ is the process of encoding data and information into an unreadable form.  
a. Encryption b. Formatting c. Transmission d. Spooling
50. \_\_\_\_ a disk, or reorganizing it so the files are stored in contiguous sectors, speeds up disk access and thus the performance of the entire computer.  
a. Formatting b. Defragmenting c. Spooling d. Compressing
51. A \_\_\_\_ is a high-speed network that connects networks in an area such as a city or town and handles the bulk of communications activity across that region.  
a. local area network (LAN) b. metropolitan area network (MAN) c. wide area network (WAN) d. variable area network (VAN)
52. The technique of breaking a message into individual packets, sending the packets along the best route available, and then reassembling the data is called \_\_\_\_.  
a. packet catching b. packet building c. packet switching d. packet swapping
53. One popular use of the \_\_\_\_ standard is in public Internet access points that offer mobile users the ability to connect to the Internet with their wireless computers and devices.  
a. Ethernet b. token ring c. TCP/IP d. 802.11
54. Types of wired home networks include all of the following except \_\_\_\_.  
a. Ethernet b. 802.11 c. powerline cable d. phonenumber
55. A database contains files, a file contains \_\_\_\_.  
a. characters, a character contains fields, and a field is made up of records  
b. fields, a field contains characters, and a character is made up of records  
c. records, a record contains characters, and a character is made up of fields  
d. records, a record contains fields, and a field is made up of characters
56. The term \_\_\_\_ refers to online or Internet-based illegal acts.  
a. malicious-logic program b. computer crime c. cybercrime d. system failure
57. Some viruses are hidden in \_\_\_\_, which are instructions saved in an application such as a word processing or spreadsheet program.  
a. macros b. logs c. cookies d. spikes
58. One of the more common causes of \_\_\_\_ is an electrical power variation.  
a. hardware vandalism b. system failure c. unauthorized access d. software theft
59. Screen savers originally were developed to prevent a problem called \_\_\_\_, in which images could be permanently etched on a monitor's screen.  
a. thrashing b. paging c. ghosting d. hacking
60. Popular embedded operating systems include all of the following except \_\_\_\_.  
a. Windows CE .NET b. Palm OS and Symbian OS c. Pocket PC 2002 d. NetWare and Linux

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61. In sequence, most system development cycles contain five phases: \_\_\_\_.
- a. planning, analysis, design, implementation, support    b. analysis, implementation, support, design, planning  
c. support, design, planning, analysis, implementation    d. implementation, analysis, support, planning, design
62. In some cases, an assembly language uses a type of \_\_\_\_ to generate the many machine language instructions for a single assembly language instruction.
- a. bug    b. script    c. macro    d. tag
63. With a procedural language, often called a \_\_\_\_, a programmer uses a series of English-like words to write instructions.
- a. first-generation language (1GL)    b. second-generation language (2GL)    c. third-generation language (3GL)    d. fourth-generation language (4GL)
64. A(n) \_\_\_\_ is an action to which an OOP language program responds.
- a. macro    b. event    c. object    d. tag
65. A(n) \_\_\_\_ is a compiled program that runs on the client.
- a. script    b. servlet    c. applet    d. image map
66. The \_\_\_\_ is the communications standard that defines how a Web server communicates with outside sources.
- a. RPG (report program generator)    b. VPE (visual programming environment)  
c. SQL (structured query language)    d. CGI (common gateway interface)
67. In sequence, the program development cycle consists of six steps: \_\_\_\_.
- a. validate design, test solution, design solution, implement design, analyze requirements, and document solution  
b. implement design, document solution, test solution, validate design, design solution, and analyze requirements  
c. analyze requirements, design solution, validate design, implement design, test solution, and document solution  
d. test solution, analyze requirements, document solution, implement design, validate design, and design solution
68. In object-oriented (OO) design, the concept of packaging data and procedures into a single object is called \_\_\_\_.
- a. validation    b. encapsulation    c. verification    d. consolidation
69. A(n) \_\_\_\_ identifies data outside a normal condition.
- a. external report    b. detailed report    c. exception report    d. summary report
70. In a bar code, a wide line is equal to a \_\_\_\_\_, and a thin line is equal to a \_\_\_\_\_.
- a. (1, 0)    b. (1, -1)    c. (0, 1)    d. (-1, 0)
- II. (15%) COMPLETION: Using the correct answer to complete each of the following questions.
1. \_\_\_\_\_ entails having the knowledge and understanding of computers and their uses.
2. The \_\_\_\_\_ is a worldwide collection of networks that connects millions of businesses, government agencies, educational institutions, and individuals.
3. A(n) \_\_\_\_\_ is a freestanding computer, usually with a touch screen, that provides information or allows customers to place orders, make payments, and access the Web.
4. The \_\_\_\_\_ is the idea that the people of the world can be split into two distinct groups: (1) those who have access to computer technology and (2) those who do not.
5. A(n) \_\_\_\_\_ is a number that uniquely identifies each computer or device connected to the Internet.
6. Each electronic document on the Web is called a(n) \_\_\_\_\_, which can contain text, graphics, audio (sound), and video.
7. Most spreadsheet software includes a(n) \_\_\_\_\_ feature, where users can change certain values in a spreadsheet to reveal the effects of those changes.
8. With \_\_\_\_\_, the processor begins fetching a second instruction before it completes the machine cycle for the first instruction.
9. A method known as \_\_\_\_\_ uses multiple processors simultaneously to execute a program.
10. A feature of PC Cards and other flash memory cards, called \_\_\_\_\_, allows users to insert and remove the cards while the computer is running.
11. \_\_\_\_\_ describes the sharpness and clearness of a digital camera image.
12. The kernel is \_\_\_\_\_, which means it remains in memory while the computer is running.
13. With \_\_\_\_\_, the operating system allocates a portion of a storage medium, usually the hard disk, to function as additional RAM.

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14. A(n) \_\_\_\_\_ is a navigation system that consists of one or more earth-based receivers that accept and analyze signals sent by satellites in order to determine the receiver's geographic location.

15. In a database, a(n) \_\_\_\_\_ is a field that uniquely identifies each record in a file.

III. (5%) To improve a simple computer system to provide a new interrupt mechanism, what should you need to modify the old hardware system and the operating system? After the modification, the new computer system will be capable to upgrade to what new system functions?

IV. (5%) The Babbage's Difference Engine was the first designed mechanical computer, use the function  $Y=X^2$  to demonstrate the method of finite differences (list the value X from 1 to 6) to evaluate the corresponding values of Y, and show a simple functional block diagram of the conceptual computer.

V. (5%) Compare the two systems between a von Neumann model and non-von Neumann models.