1. How many type of computer do you know? What are they?
   4 → mainframe, minicomputer, microcomputer/PCs, portable computer
2. What is difference between a mainframe and a PC?
   + Mainframe
   - Many people use at the same time
   - Largest, the most powerful, the most expensive
   - Process large amount of data

   + PC

   - The most common type of computer
   - Smaller, less powerful, cheaper than mainframe
3. How many *parts* of computer? What are they?
   8 → hard disk drive, motherboard, memory chip, powerful supply, processor, speaker, expansion cards, floppy drive
4. How many *main parts* of computer? What are they?
   2→ hardware and software
5. What is computer hardware?
   Is physical part or components of a computer
6. What is computer software?
   Is instructions that can be stored and ran by hardware
7. What is a motherboard?
   A motherboard is the main printed ciruit board(PCB) found in computers and other expandable systems
8. What does SIMMS stand for? And describe?
   SIMMS: Single in-line memory modules: These are memory chips. The more you have, the more work you can do at a time. Empty memory slots mean you can add more memory
9. What is CPU? And it functions?
   - CPU: Central Processing Unit: This is the 'brain' of the computer
   - CPU functions: execute program instructions and coordinate the activities of all the other units

10. What is an expansion slot?
    An expansion slot is a socket on the motherboard that is used to insert an expansion card

11. What is cache momory?

Is a small block of high speed momory(RAM) that enhance PC performance by pre-loading information from the main memory and passing it to the processor and demand

12. What is ROM?

Read Only Memory: is a type of storage medium that permanently stores data on PCs and other electronic devices

13. What is difference between ROM and RAM?

ROM: hold memory even when power is removed

RAM: lost its contents when you switch off

14. How many type of portable computer? What are they? Describe?

4 → laptop, notebook, subnotebook, handheld/palmtop

+ Laptop:

- About the size of a small typewriter
- Less common now because smaller and lighter portable are available

+ Notebook:

- About the size of a piece of writing paper
- The most common type of portable

+ Subnotebook:

- Not quite as big as notebook
- Can fit into a jacket pocket

+ Handheld or palmtop:

- Small enough to fit into the palm of one hand.
- Not easy to type with because of their size
- Often used as personal organizers

15. Make a list of computer port?

- Keyboard
- Parallel
- Serial port
- COM I
- Video port
- Mouse
- Speaker

16. Write the instruction for virus checking a disk?
    1. Put the disk into the drive
    2. Start the virus checking program
    3. Select the drive to be checked
    4. Click the "find" button
    5. Don't exit the program until the check is complete
    6. Select "yes" or "no" for checking another disk

17. How many input devices do you know? What are they? Vietnamese meaning?
    8 → - Joystick: tay cầm
    - Lightpen: bút quang
    - Scanner: máy quét
    - Digital camera: máy ảnh kỹ thuật số
    - Mouse: chuột
    - Keyboard: bàn phím
    - Microphone: míc
    - Barcode scanner: máy quét mã vạch
18. What does a scanner do?
    A scanner converts text or pictures into electronic codes that can be manipulated by the computer
19. How many types of scanner?
    2 → flatbed scanner and colour scanner
20. How many steps to input voice? What are they?
    5 → 1. The users says a word into a microphone
       2. the mic converts te word from audio signals into electrical signals
       3. The speech recognition board converts the signals into binary numbers
       4. The computer compares the binary code with its stored vocabulary
       5. The screen displays the correct word
21. What are advantages and disadvantages of film camera?
    + adv:
    - Film camera are cheap
    - The quality of film camera pictures is much better than digital camera

    + disadv:

    - Each picture costs a lot because there are processing costs
    - The picture have tobe scanned ti transfer images to a PC

22. Advantages and disadvantages of digital camera

+ adv:
- Digital camera don't use film, you take pictures on to solid state memory
- The cost for each picture is low
- It is also easy to download the pictures

+ disadv:
- Digital camera are more expensive than film camera

23. What is an output device? What are they?

An output device is any piece of computer hardware equipment which converts information into human-readable form. It can be text, graphics, tactile, audio, and video

➔ At least 6 types: monitor, printer, headphones, computer speaker, projector, sound card

24. How many type of printer? What are they?

3 ➔ Dot-matrix printer, inkjet printer, laser printer

25,26,27. What are advantages and disadvantages of dot-matrix, inkjet, laser printer?

Printer	Advantages	Disadvantages
Dot-matrix	- The cheapest kind of printer - Cheap to run	- Low print quality - Slow, noisy
Inkjet	- Better quality - Quieter operation - Good chose for colour	- Relatively slow - Expensive to run
Laser	- Best quality - Printer faster - Cost less to run than an Inkjet - Great for black and white	- Cost almost twice as much

28. How many types of main section of keyboard? What are they and describe them?

4 ➔

- Main keyboard: has a key for each letter of the alphabet. It also has keys for the digits 0 to 9, punctuation marks like commas and full steps and other common symbols
- Function keys: this section includes the escape key to the left and the print screen , scoll lock, and break keys to the right. The function keys labelled F1

to F12 don't have fixed functions. You can program them to perform different functions such as writing and printing.
- Editing keys: includes keys which insert and delete data. It also includes the cursor keys, also called the arrow keys. These keys move the cursor around the screen.
- Numeric keypad. This section has keys for the digits 0 to 9 and for common mathematical symbols like plus and minus.

29. What is a computer crime?

- is the crime make faults can develop in computer systems

- without authorization

- include: hacking, pirating, intentionally viruses

30. What is virus? Can we remove it? How?
- Viruses are programs the have been written to make a computer bahave in unexpected and undesired way.
- Yes → An anti-virus program scan disks and files looking for programming code that its known to belong to particular virus programs. When a piece of virus code is found, the virus can be identified, and an appropriate program run to delete the virus code from the disk or file

31. What is a storage device? How many types? What are advantages, disadvantages of each part?
→ A storage device is any computing hardware that is used for storing, porting and extracting data files and objects
→ At least 6 types

Storage device	Advantages	Disadvantages
Floppy disk	- Conform to a standard - They are very cheap	- Slow and have limited capacity
Fixed hard disk	- Fast and storage data more than floppy	- You can't use them to transfer data
Removable hard disk	- Fast and high capacities	- Relatively expensive - Do not all conform to one standard
CD-ROM disk	- Can hold large amounts of data - Cheap to make	- Read only - can't change the info on them - Slow compared to hard disks
Magneto-optical disk	- Removable, large capacities and last for a long time	- Expensive - Do not all conform to one standard

Magnetic tape	- Can storage very large amounts of data - Cheap medium	- Don't allow random access - Tape drives are slow

32. What is a network?

A network is simply two or more computers linked together. It allows users to share not only data files and software applications, but also hardware like printers and other computer resources such as fax.

33. What are the network hardware components? Describe at least 3 types?

+ Hub, switch, firewall, router, cables, network bridge, servers, clients

- Servers, clients ở câu 35
- Cables: desktops typically connect via telephone-type cabling to this intermediary device, which enables communication between servers and desktops
- Hub: one you have a network you can share any number of these, including printers, scanners, CD-ROM drives, and backup drives.
- Router: a device which selects the best route to send data from one network to another
- Network bridge: is a computer networking device that creates a single aggregate network from multiple communication networks or network segments.
- Firewall: is a network security system that monitors and controls incoming and outgoing network traffic based on predetermined security rules

34. What is different between LAN and WAN?
- LAN(Local Area Network): is a network that connected over a small area
- WAN(Wide Area Network): is a network that connected over a large area

35. What are advantages of LAN?
- High bandwidth
- Easy to management
- Low cost
- Suitable for use in home, school,…

36. What are advantages of WAN?
- Unlimited area connection range
- High data transfer rate
- Suitable for use in enterprise or an organization

37. What are servers/clients?
   + Servers:
   - Most networks have at least one central computer which all the desktop computers connect to
   - This is the most important computer on your network
   - It stores the data file and application software programs that the users need to access or share with others

   + Clients:
   - This is the desktop computer or notebook computer on your desk. It is linked to the server and can access file and applications on it

38. How many types of network topology? What are they?
   4 → (ring, bus, star, mesh) topology
39. 40.41: What is a ring, bus, star topology?
   - Ring topology: each computer is connected to its neighbour in a circle. The data flows in one direction round the ring
   - Bus topology: has all the computers connected to a common cable, the data travels in both directions along the cable
   - Star topology: has a server computer at the centre and separate cable connecting the server to each of the other computers in the network. The central server controls the flow of data in the network
42. What are the most common topologies? Why?
   → A star, ring, bus topology
   → Because, in fact, they usually use mix of 3 types togethe
43. What are the advantages of password?
   Passwords are supposed to prevent unauthorized users, or hackers, from breaking into the system, It keep the system, account secure
44. What are the rules of a good password?
   + Password should
   - Be at least 6 characters along
   - Have a mixture of numbers and letter
   - Have a mixture of capital and small letter
   - Be easy to remember

   + Password shouldn't

   - Be a word from dictionary
   - Be a common name
   - Include spaces, hypens, dots, or symbols with special meaning

45. Why shouldn't we use words in dictionary and common name as passwords?
Some hackers use special computer programs which automatically try all the words an combination words in a computerlized dictionary to try discover or crack user passwords

46. What is the internet?
The Internet is the global system of interconnected computer networks that uses the Internet protocol suite (TCP/IP) to communicate between networks and devices.

47. What does TCP and IP stand for?
- TCP: Transmission Control Protocol
- IP: Internet Protocol

48. What does TCP and IP vietnamese?
- TCP: Giao thức điều khiển giao vận   - IP: Giao thức liên mạng

49. What is the internet protocol suite(TCP/IP)?
IP suite is the standard network model and communication protocol stack used on the internet and on most other computer networks

50. How can we make use of the security of the internet?
Follow as security and privacy on the internet

51. How do you protect a message in email privacy?
Put it in a sort of 'envelope', to encode it with some form of encryption

52. What do you do avoid risks of security on the web?
- You should set all security alerts to high on your Web browser. Netscape Communication and Internet Explorer display a lock when the web page is secure and allow you to disable or delete 'cookies'
- If you use online bank services, make sure your bank uses digital certificates.

53. What does SET stand for?
SET: Secure Electronic Transactions

54. What are the most popular methods of protection in the network security?
Encryption, decryption systems and firewalls

55. How can you protect your PC from the viruses?
- Don't open email attachments from strangers
- Take care when downloading files from the web
- Update your anti-virus software as often as possible

56. Write instruction to replace a motherboard?
1. Remove the old motherboard
2. Add the processor
3. Add the memory, don't touch the contacts
4. Fit the new motherboard
5. Put it back together

57. What is price, screen size of monitor?
    - Price: The price mainly depends on the screen size. Common monitor sizes are 14- inch, 15-inch, 17-inch, and 21-inch. The price also depends on aperture grill pitch, resolution, and the number of controls.
    - Screen size: The size of the screen is the diagonal distance from one corner to another. The actual area for images is smaller than this.

58. What is Aperture grill pitch, Maximum resoluție, Refresh rate of monitor?
    - Aperture grill pitch: + This controls the space between the dots which make up the image.
      + The less space between the dots, the better the display.
      + Most monitors offer 0.28mm dot pitch but some go as high as 0.31mm or as low as 0.25mm.
    - Maximum resoluție: The quality of the display depends on the number of dots which make up the image. The more dots, the better the display.
    - Refresh rate: The monitor refreshes the image on the screen all the time. The faster this happens, the less the screen flickers. You should have a refresh rate of at least 72Hz.
59. What is Safety standards, Power-saving feature, On-screen menu of monitor?
    - Safety standards: These are international standards to control harmful signals.
    - Power-saving feature: The power the monitor uses automatically reduces when it is not in use.
    - On-screen menu: Digital controls on the screen allow you to adjust the image.
60. What is email? How many parts of email? Write a typical email address, underline its parts and give the names?
    - Email is a method of exchanging messages ("mail") between people using electronic devices
    - 2 parts: local part and domain
            Locka @ pesto . co . uk
            Userid   domain   country
                 Type of organization

61. What is newgroup?
    - Newgroup is a place on the internet where people who are interested in a particular subject can exchange messages about it, or the people who use this place

62. What is hacker? How many types of hacker? Describe each type?
- A hacker: A hacker is an individual who uses computer, networking or other skills to overcome a technical problem
- 3 types of hackers: white hat, black hat and gray hat hackers
- White hat hackers: strive to operate in the public's best interest, rather than to create a trouble
- Black hat hackers: intentionally gain unauthorized access to networks and systems with malicious intent
- Gray hat hackers: fall somewhere between white hat hackers and black hat hackers

63. How many steps of processing data? What are they?
➔ 3 steps:
1. data is fed into the computer's memory
2. when the program is run, the computer performs a set of instructions and processes the data
3. we can see the results(the output) on the screen or in printed form

64. Từ viết tắt có thể hỏi?
- IP: Internet Protocol

- TCP: Transmission protocol
- RAM: Random Access Memory
- ROM: Read Only Memory
- NIC: Network Interface Card
- ISP: Internet Service Provider
- SIMMS: Single Inline Memory Module
- CPU: Central Processing Unit
- OCP: Optical Character Recognition
- PCB: Printed Circuit Board
- LAN: Local Area Network
- WAN: Wide Area Network