HỌC VIỆN CÔNG NGHỆ BƯU CHÍNH VIỄN THÔNG

BÀI TẬP

TIẾNG ANH CHUYÊN NGÀNH CNTT

(Dùng cho sinh viên hệ đào tạo đại học từ xa)

Lưu hành nội bộ

HÀ NỘI - 2006

BÀI TẬP

TIẾNG ANH CHUYÊN NGÀNH CNTT

Biên soạn : **THS. LÊ THỊ HỒNG HẠNH**

CN. NGUYỄN THỊ HUỆ

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CÂU HỎI

Câu 1: Hãy đọc kỹ đoạn văn sau và trả lời câu hỏi

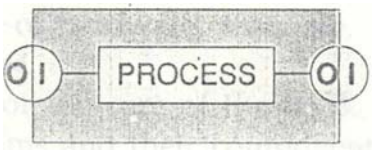
system

Input-process-output

inputs *process*

outputs.

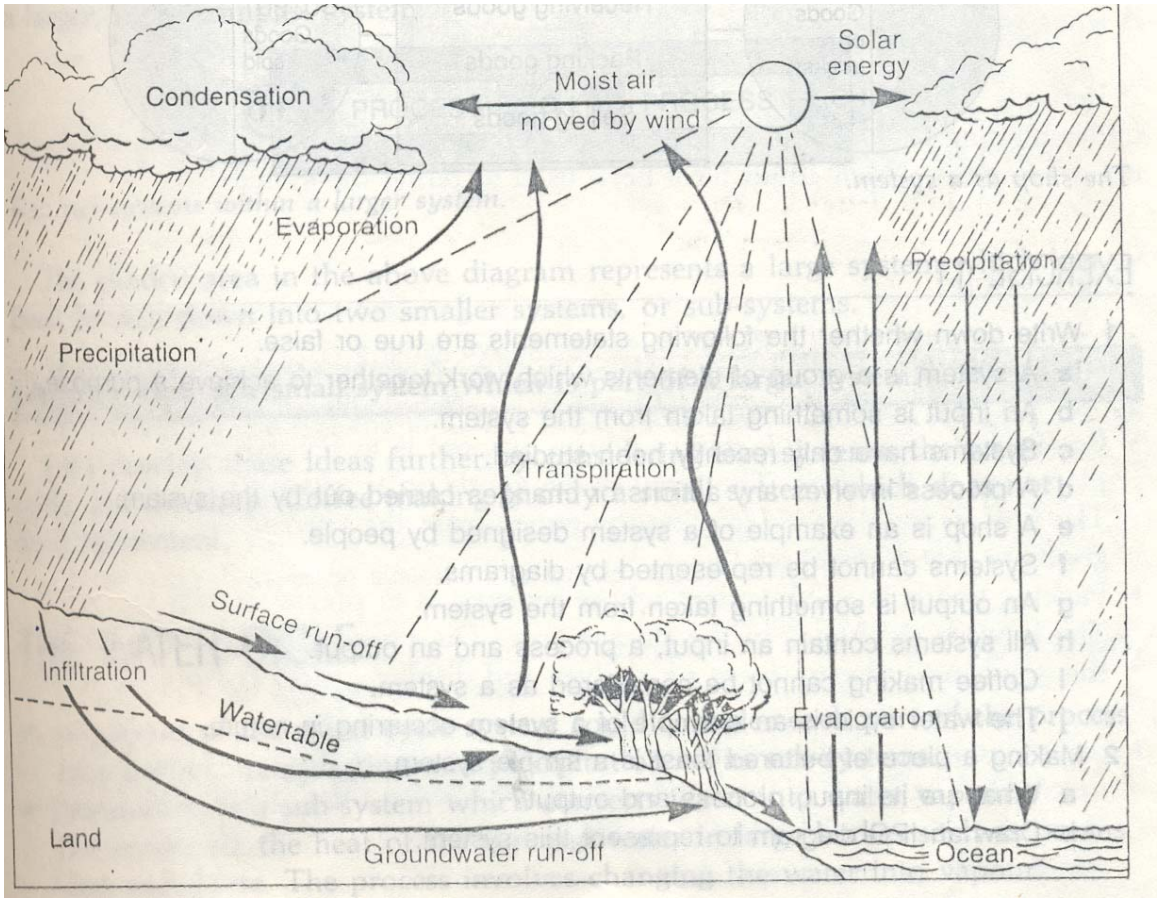
(IPO)



THE WATER CYCLE

THE SHOP

goods



1. Write down whether the following statements are true or false.

2. Making a piece of buttered toast is a simple system.

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3. Planting a tree bought from the nursery can be considered a system.

4. A recorded music system involves using a record, cassette or compact disc to

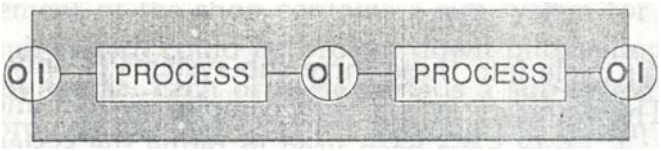
5. Every action we take can be considered as a system. Do you agree?

Câu 2: Refinement and synthesis

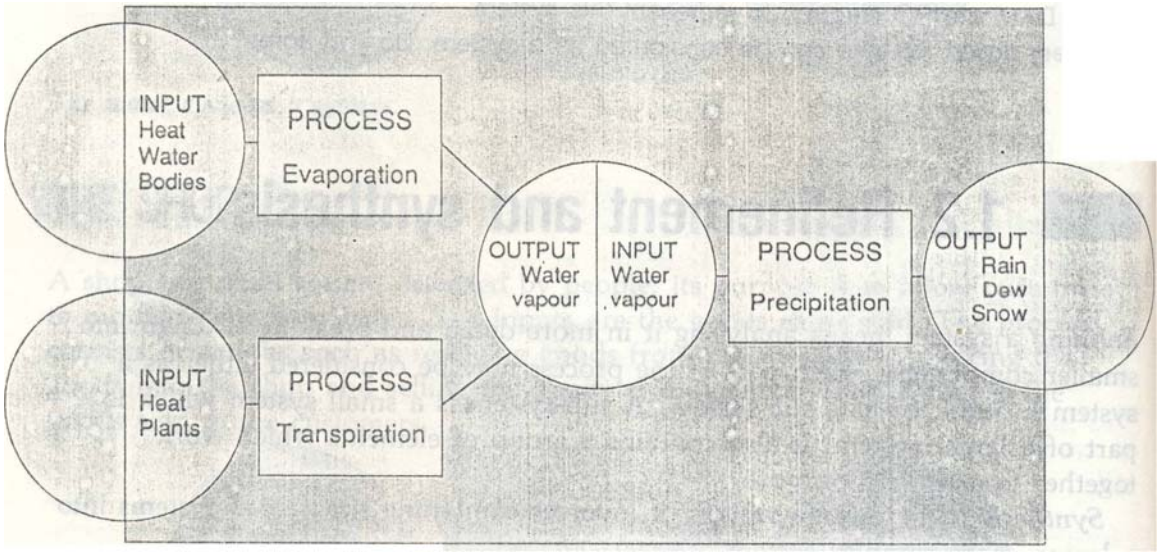
Refining

sub-system.

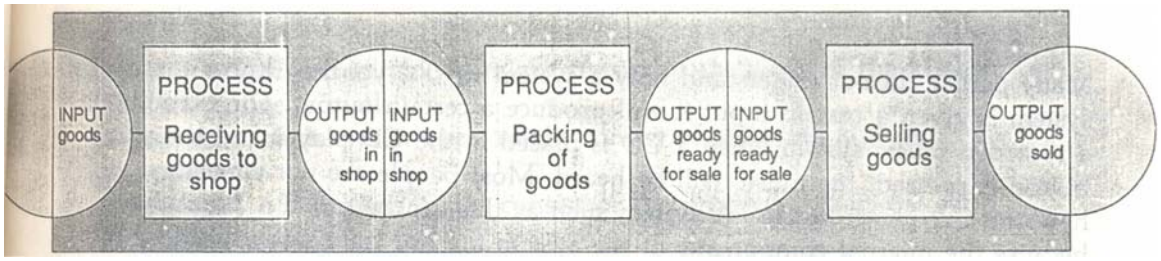
Synthesis



THE WATER CYCLE


INPUT
Heat
Water
Bodies
PROCESS
Evaporation
INPUT
Heat
Plants
PROCESS
Transpiration
OUTPUT
Water
vapour
INPUT
Water
vapour
PROCESS
Precipitation
OUTPUT
Rain
Dew
Snow

THE SHOP


INPUT
goods
PROCESS
Receiving
goods to
shop
OUTPUT
goods
in
shop
INPUT
goods
in
shop
PROCESS
Packing
of
goods
OUTPUT
goods
ready
for sale
INPUT
goods
ready
for sale
PROCESS
Selling
goods
OUTPUT
goods
sold

ở

1. Copy and complete the following sentences.

2. What is a sub-system?

3. Explain the difference between, refinement and synthesis.

4. 'Systems can be viewed at different levels.' Explain this statement.

5. Refine your system for planting a tree bought from the nursery into sub-systems. List these sub-systems.

Câu 3: A system as a black box

'black box'

ENVIRONMENT

environment.

ỏ

BOUNDARY

boundary.

1. For each of the following statements, select a matching phrase from the list below.

2. What does the term 'black box' mean?

3. 'The boundaries of a particular system will vary.' Explain this statement.

4. Does the environment contain factors outside the system? Explain your answer.

5.Why are computer systems black boxes to most people?

6. List four systems which are black boxes to you.

Câu 4: PROCEDURES

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PROCESSOR AND RESOURCES

1. The vowels have been omitted from these words. Write out the completed words.

2. Why is the system defined in terms of procedures, processor and resources?

3. What is the meaning of the following terms?

4. Why do procedures need to take into account the order of the processes?

5 .Making a piece of buttered toast is a system. What are its procedures, processor and resources?

6 . Planting a tree bought at the nursery is a system. What are its procedures, processor and resources?

Câu 5: Hierarchy charts

sub-processes, modules.

hierarchy chart.

1 Write down whether the following statements are true or false.

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2 What is the purpose of a hierarchy chart?

3 Hierarchy charts use a top-down method. Explain the meaning of this.

4 What is a module in a hierarchy chart? .

5 The first level in a hierarchy chart is called the top level. What is the next lower level called?

6 Making a piece of buttered toast 'is a system. Draw a hierarchy chart to illustrate the process for toasting the bread.

7 The recorded music system involves using a record, cassette or compact disc to listen to music. Draw a hierarchy chart to illustrate the process of selecting music

Câu 6: IPO charts

1. Complete the following sentences

2. Describe an IPO chart.

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3. Why are IPO charts a good way to describe a system?

4. Making a piece of buttered toast is a system. Draw an IPO chart to describe this system.

5. Planting a tree bought at the nursery is a system. Draw an IPO chart to describe this system.

6. The recorded music system involves using a record, cassette or compact disc to listen to music. Draw an IPO chart to describe this system.

Câu 7: Specifying procedures

algorithm.

1 Write down whether the following statements are true or false.

2. What is an algorithm?

3. Explain the difference between procedures and an algorithm.

4. What needs to be done if an algorithm is unsatisfactory?

ỏ

Câu 8: Algorithms

programming language

English

prose pseudocode flowcharts.

1. For each of the following statements, select a matching phrase from the list below.

algorithm flowchart programming

pseudocode decision English prose

2. Briefly describe the following methods of algorithm description:

3 .Why are flowcharts often favoured as a method of describing algorithms?

4. When is it necessary for flowlines to have arrows?

5.Write down two advantages pseudocode has over flowcharts.

6 .Why are keywords high lighted in pseudocode?

7. What is the purpose of indenting lines in structured English and pseudocode?

8. Write algorithms in English prose, pseudocode and as a flowchart for the following:

Câu 9: Control Structures

Control structures

sequence/ selection loop.

Example:

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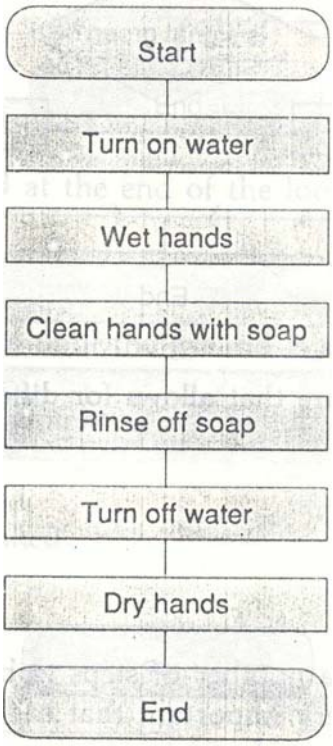

SELECTION

Example:

English prose

Pseudocode

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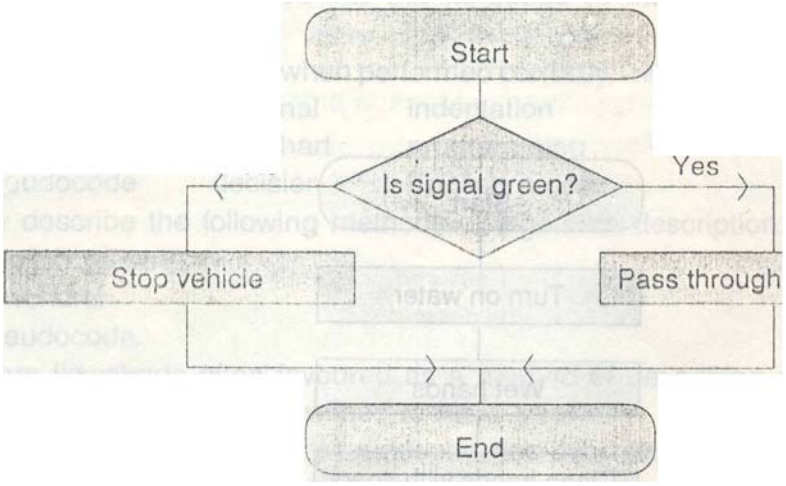

LOOP

Example:

English prose

Pseudocode

Example:

English prose

Pseudocode

1) *The vowels have been omitted from these words. Write out the completed words*

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2. What are control structures used for?

3. Explain the difference between the following control structures:

Câu 10: Review Exercise 1

1. Copy and complete the following sentences.

2. Turning on the TV and watching your favourite TV show can be considered as a

ở

system

3. Why do systems undergo refinement?

4. What is the difference between the boundary of a system and its environment?

5. How are the procedures, processor and resources related in a system?

6. Explain the difference between hierarchy charts and IPO charts.

7. Why are algorithms written?

8. List three methods of describing an algorithm.

9. Describe the three basic control structures.

Câu 11: A computer system

hardware *software,*

data

1. Copy and complete the following sentences.

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2. What is a computer?

3. What is the purpose of a computer system?

Câu 12: Input

keyboard

cursor,

1. Write down whether the following statements are true or false..

ở

2 .Make a drawing of the keyboard used on the computers at school. Mark the standard typewriter keys and the special computer keys. Try pressing the various keys to learn what they do. .

3 .What is the long key across the bottom used for?

Câu 13: Output

monitor printer.

The monitor

The printer

1. For each of the following statements, select a matching word or phrase from the list below.

ỏ

2. Why are LCD screens used on laptop computers instead of CRT monitors?

3. What is the main difference between a computer monitor and a television set in presentation of data?

4. In what forms do computers present data to users?

5. What would you check if a printer was not working correctly?

Câu 14: Processing

central processing unit CPU.

silicon chip integrated circuit. microprocessor

1. Vowels have been omitted from these words. Write out the completed words.

2. What does the central processing unit do?

3. How is data changed into information?

4. Microprocessors are being used in many different ways. Write down five pieces of equipment. in which a microprocessor is used.

5. If possible, under teacher supervision, examine the internal parts of the school's computer. Find the CPU.

Câu 15: Storage

primary storage

byte

ů

(gigabytes),

(megabytes) *(kilobytes),*

hard disk *floppy disk.*

disk drive.

1. Write down whether the following statements are true or false.

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2. What is the difference between primary storage and secondary storage?

3. How is information stored on a disk?

4 .What should a floppy disk be stored in when it is not in the disk drive?

5 .What is the difference between a hard disk and a floppy disk.

6. Why is it important not to leave your floppy disks on the monitor or the disk drive?

Câu 16: Control

control unit

1. From the list below, write down the word that best fits each empty. space in the following passage. There are more words in the list than you need.

a……..

b…….. **c ……..**

d……

e

2. What is the purpose of control?

3. Where is the control unit located in a computer system?

4 .How is the speed of the processor measured?

Câu 17: Perspective-Security

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1. Copy and complete the following sentences.

……..

2. Why is the loss of data a more serious problem than the loss of hardware or software?

3. What measures are used to protect data in large computer systems?

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4. How can access to a computer system be restricted to authorised persons?

5 .Why would people want to steal data?

6. List any measures that could be used to protect data when using microcomputers.

Câu 18: REVIEW EXERCISE 2

1. Copy and complete the following sentences.

2. What are the five co-operating sub-systems or components of a computer system?

3. Describe a floppy disk and list two reasons why it is frequently used with microcomputers.

4. Explain the purpose of the following computer devices:

5. Why do the majority of computers use secondary storage devices?

6. What is the clock speed of a computer?

Câu 19: Hardware configurations

MIPS,

workstations, terminals.

time-sharing

peripherals

personal computers,

ỏ

1. Copy and complete the following sentences

2. Why are microcomputers often called personal computers?

3. Construct a table to illustrate the different computer types or configurations and their relative costs and processing speeds.

4. What environmental constraints are there for the larger computer systems?

5. Where are supercomputers mainly used?

6. Explain the meaning of time-sharing.

7 .What type of computer does your school use? Find out their cost and processing speed.

Câu 20: Classifying hardware devices

ở

motherboard *arithmetic logic unit, control unit, registers,* *(ROM)* *(RAM).*

interface cards

daughter boards.

1. Vowels have been omitted from these words. Write out the completed words.

2. What is a peripheral device?

3. What is a central processor device?

4. Where are central processor devices usually located?

5. List any peripheral devices attached to your school's microcomputer system.

Câu 21: Input devices

interface

barcode wand

keyboard

mouse

Joysticks

graphics tablet

light pen

Touch screens

document reader

Optical character readers

Scanners

disk drive

ở

1. Copy and complete the following sentences.

2. Why did Christopher Shoies scramble the most commonly typed letters on the QWERTY keyboard?

3. Explain why the QWERTY keyboard is more widely used than the Dvorak keyboard

4 .Name three keys that are used on a keyboard but not found on a normal typewriter.

5. A high-speed card reader can read 2400 cards per minute, each card containing 80 characters.

6. List any advantages of using optical character recognition in a large shop.

7. What is a light pen?

Câu 22: Output devices

monitor

plotter

dot matrix printer

Ink-jet printers

laser printer

Bubble-jet printers

disk drive

1. For each of the following statements select a matching word or phrase from the list below.

2. What is meant by the term 'dot-matrix'?

3. What is a plotter?

4. Which type of printer would be best suited to the following computer applications?

5. In what applications can a plotter be used?

6. Explain how a laser printer works.

7. What is the difference in producing characters between an ink-jet printer and a dot-matrix printer?

8 .Will printers ever operate at speeds greater than the computer Explain your answer

9. Make a list of the output devices used in your school.

Câu 23: Primary storage

RAM

ROM

1. Write down whether the following statements are true or false.

ỏ

2. What are the two main types of storage devices?

3. Primary storage is known by four other terms. What are they?

4. Why is access time from the CPU to primary storage very fast?

5. How are the computer's capabilities by the amount of primary storage it has?

6. Write down the number of bytes in

7. What is primary storage?

8. What does the term 'volatile' mean in relation to a computer's memory?

9. Explain the difference between RAM and ROM.

10. What are the terms used for retrieving data from the computer's memory, and entering data into the computer's memory?

11.Who determines the contents of ROM in a computer?

Câu 24: Secondary storage

ỏ

1 Write the word that best fits the empty spaces in the sentences of the passage. Below is a list of words you can choose from. There are more words in the list than you will need.

a

b

c

d

e

f

2. The vowels have been omitted from these words. Write out the completed words.

3. Why is secondary storage used on most computers?

4. Explain the difference between random access and sequential access of data.

5. What is secondary storage?

Câu 25: Magnetic tape

Magnetic tape

reel-to-reel tape

cassette tape

cartridge tape

1. Copy and complete the following sentences.

2. How much data can a typical reel-to-reel tape hold?

3.What are tile two problems in using cassette tapes to store data?

4. How is the data stored on magnetic tapes?

5. List the advantages and disadvantages in using magnetic tapes as a secondary storage medium.

Câu 26: Magnetic disk

Floppy disks

hard disk

fixed disk

removable carlridge

disk pack

1. For each of the following statements select a matching word or phrase from the list below.

ỏ

2. A magnetic disk drive can 'read' 20 000 bytes (characters) per second. How long would it take to 'read' a 100 page telephone directory consisting of about 15 000 characters per page?

3. Find the storage capacity of the following:

4. What are the three main advantages magnetic disks have over, magnetic tapes?

5. For a large computer system, what type of magnetic disks would be appropriate?

6. What safety precautions are necessary to protect floppy disks from data loss?

Câu 27: Optical technology

Optical laser disks

CD-ROM

optical card,

ỏ

Optical tape

1. The vowels have been omitted from these words. Write out the completed words.

.

2. What are the advantages and disadvantages of using a laser disk as a secondary storage medium?

3. How much data can optical tapes store if they are in cassette form?

4. List three secondary storage media which involve the use of optical technology.

5. The optical card has the potential to alter our way of life. Explain.

6. Why do libraries started to convert to CD-ROM systems?

7. Describe an optical laser disk.

Câu 28: Processing and control devices

or

motherboard.

megahertz

(MIPS).

1. Copy and complete the following sentences.

2. What is the CPU sometimes called in a microcomputer?

3. If the speed of a CPU is 16 MHz, what does this mean?

4. How fast can a microcomputer execute an instruction?

ỏ

5. What is a register?

6. Describe three tasks that the ALU performs.

Câu 29: Buses

bus

1 A hand-held calculator is a simple form of computer. Consider these parts of the calculator liquid crystal display, keys, semi-conductor, wires and memory. Classify these in terms of the components of a computer; that is, CPU, primary storage, input devices, output devices and buses.

2. Write the letters which come before these letters in the alphabet.

3. Why are buses important in a computer system?

4. What do buses carry besides data.

Câu 30: Perspective-Historical

EARLY ELECTRONIC COMPUTERS

,

GENERATIONS OF COMPUTERS

1. Copy and complete the following sentences.

2. Briefly list the contribution of the following people in the development of calculating devices.

3. How many calculations could the Mark 1 perform in one minute?

ỏ

4. Compare the storage capacity of the Mark 1 with today's personal computer.

5. What is the importance of the following computers.

6. Name two advantages the second generation of computers had over the firs tgeneration.

7. What effect did the invention of the silicon chip have on computers?

8. What was the importance of the development of the Altair computer?

9. Why was the 1890 US census so much easier to tabulate than the 1880 census?

10. Why are integrated circuits faster than transistors?

Câu 31:

firmware.

System software

System software

machine language

Language translators

Resident monitor programs

OPERATING SYSTEMS

operating system

extended machine.

single-tasking multi-tasking.

booting

1. Copy and complete the following sentences.

ỏ

2. What does the term 'booting DOS' mean?

3. Name the two main kinds of software.

4. Why are language translators essential?

5. Write down an example of a resident monitor program.

6. Explain the difference between single-tasking and multi-tasking.

7. What does a computer programmer do?

8. Name three types of language translators.

9. What disk operating system does your school computer system use?

10. Copy and complete the following table for your disk operating system.

Function	*Command or action*

11. Boot DOS and complete the following tasks using your data disk.' It may be necessary to use a utility program to carry out some of these tasks.

Câu 32: Application software

Application software

1. The vowels have been omitted from these words. Write out the completed words,

2. What is custom-made software?

3. Why do people prefer to buy software packages rather than custom-made software

4. What is meant by 'labour-intensive'?

5. Why do most software packages have documentation?

6. Examine as many software packages as possible. Write an advertisement for the piece of software that you like best.

7.Without referring to the documentation, use a software package. Write some documentation to explain the software in your own words.

8. Search through a software catalogue and make a request to your teacher to purchase software package. The request should outline the reasons for the purchase and it should be written using a word processor.

Câu 33: Programming languages

programming languages.

Low-level languages *Machine language*

Assembly language

assembler

High-level languages

compiler *interpreter.*

1. For each of the following statements, select a matching word or phrase from the list below

ở

machine language assembly language interpreter Logo assemble

compiler high-level language low-level language

2. Why do computers only understand the binary number system?

3. What are the advantages and disadvantages in using a compiler instead of an interpreter to translate high-level code into machine code?

4. What level of programming language do most programmers use?

5. List three disadvantages in using assembly language.

6. What do the following language translators do?

7. Explain the difference between low-level language and high-level language.

8. What level of code would an assembler be written in?

Câu 34: Logo - A high-level language

to

Command	*Example*	

or

ỏ

Perspective-Copyright and viruses

piracy,

virus

1. How are computer viruses spread?

2. What would occur if the copyright laws didn't protect software authors?

3. What is a computer virus?

4. Why are computer viruses written?

5. List two ways that the' copyright of computer programs could be infringed.

Câu 35:

Data

ở

information

digital *analog*

Digital representation

binary number system

bit

1. For each of the following statements select a matching phrase from the list below.

Data, decimal system, binary system , information, bit, digital data

2. Explain the difference between data and information.

3. Name the two ways data can be represented.

ỏ

4 What is the name of the number system used by digital computers?

Câu 36: Digital interpretation

bytes.

words

HEXADECIMAL

hexadecimal.

nibbles.

ở

1. Copy and. complete the following sentences.

2. Why is the .hexadecimal number system important for programmers?

3. Explain the meaning of the following terms.

4. Write down the numbers from a to 63 in hexadecimal code.

Câu 37: Analog representation

ỏ

1. For each of the following statements, select a matching word from the list below.

word binary hexadecimal byte

ASCII analog bit digital

2. Why is digital representation used in the majority of computers in the world?

3. What is the advantage of analog representation over digital representation?

4. Explain the difference between an analog device and a digital device.

5. What is an analog computer?

6. Name three applications in which an analog computer may be used.

7. What form does the output from an analog computer usually take?

Câu 38: Data transfer

Data transfer

serial transfer parallel transfer.

UART,

interface card modem.

ở

RATES OF TRANSMISSION

baud rate

bits per second

1. Write down whether the following statements are true or false.

2. How is the speed of data transfer measured?

3. What is the purpose of a universal asynchronous transmitter?

4. Why is parallel transfer faster than serial transfer?

5. What is a modem?

6. Why is serial transfer more common than parallel transfer?

Câu 39: Intefaces and protocols

interface

Protocols

ỏ

hand-shaking,

1 For each of the following statements select a matching word or phrase from the list below

2. Why are interfaces essential for data transfer?

3. list at least three devices which might require a

4. What is a protocol?

5. List four characteristics which require protocols so that two systems can hand-shake.

6. Determine how many interface cards are attached to your school computer system.

Are these interfaces serial or parallel?

Câu 40: Media

media

ỏ

pixel

1. Copy and complete the following sentences.

2. How is a laser beam used to represent data in an optical medium?

3. Explain the difference between impact printers and non-impact printers.

4. How is data represented in a monitor?

5. What types of media can be used to store data?

6. How is data removed from a magnetic medium?

Câu 41: Perspective-Privacy

ỏ

1. The vowels have been omitted from these words. Write out the completed words.

2. What is meant by privacy in relation to data kept on computer systems?

3. What factors can cause data collected by an organisation to be inaccurate?

4. How does computer technology increase the danger of individual privacy being invaded?

5. What kinds of personal data are collected and stored about individuals?

6. Which organisation stores the largest amount of personal data in Australia?

7. Who owns the data stored on a computer system?

8. Do you think the data should be made available in the following situations?
Explain your answer.

Câu 42:

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Câu 43:

1. Copy and complete the following sentences.

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2. Name the two broad types of software.

3. What are people who write software called?

4. List two examples of a software package, .

5. Explain the difference between a compiler and an interpreter.

6. What was Logo designed to do? I

7. Describe the difference between system software and application software.

8. List two examples of:

9.List four tasks which are performed by a disk operating system.

10. Name the low-level language that consists of Os and 1s.

11. What happens when a system has been booted?

12. List two things that might be included in the documentation for a software package.

The class is divided into six groups and each group is allocated one software packal Each group will write approximately one page using a word processor evaluating the;software, then provide a computer demonstration of the software to the class. The software evaluation could include:

-
-
-
-
-
-
-
-
-
-
-

Câu 44:

1 Copy and complete the following sentences.

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2. What is the difference between data and information?

3. Change the following decimal numbers .into binary numbers using eight bits.

4. How is the hexadecimal number system used?

5. Change the following hexadecimal numbers into decimal numbers.

6. Using the ASCII code, convert the following characters into binary code which can be stored by the computer.

7. Explain the difference between digital representation of data and analog representation

8. What are the two ways data can be transferred?

9. Why are interfaces and protocols important to a computer system?

Câu 45:

Design and construction

SYSTEMS ANALYSTS

systems analyst

PROGRAMMERS

Computer programmers

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COMPUTER ENGINEERS

Computer engineers

1. Copy and complete the following sentences.

2. What are the specifications of a program?

3. List the qualifications required to be a

4. How are people involved in a computer system?

5. Describe the role of a systems analyst.

6. Explain the difference between a system programmer and an application programmer.

7. Why do engineers need a high level of technical knowledge?

8. Using the employment section of a newspaper, find the average salary of a

Câu 46: Operations and maintenance

Managers

COMPUTER OPERATORS

computer operators

DATA ENTRY OPERATORS

operators

COMPUTER CONSULTANTS

Computer consultants

TRAINING SPECIALISTS

Training specialists

TECHNICAL SUPPORT STAFF

ỏ

COMPUTER TECHNICIANS

Computer technicians

1. The vowels have been omitted from these words. Write out the completed words.

2. Describe the role of a computer operator.

3. How do technical support staff usually assist users?

4. When would a business employ a training specialist?

5. Describe a computer consultant's job.

6. What skills are necessary to become a data entry operator?

7. 'Computer operators require more knowledge about computers than data entry operators.' Do you agree with this statement? Explain your answer.

8. How are managers involved in the computer system?

9. What personal qualities are necessary to become a computer operator?

10. Describe a computer technician's job.

11. List the steps taken by a computer operator if a computer breaks down.

Câu 47: Users

direct users, indirect users intermediary users.

1. For each of the following statements, select a matching word or phrase from the list below.

2. What is meant by the term 'user.

3. Explain the types of people who are:

4. Do you think it's possible in our society for a person not to be affected by computer systems? Give reasons for your answer.

ỏ

5. What type of user is a computer programmer?

6. List two ways computer systems may affect you.

7. Explain the term 'user interface'.

Câu 48:Perspective-Ergonomics and safety

ergonomics

SCREEN

KEYBOARD

FURNITURE

ů

LIGHTING

TEMPERATURE

NOISE

WORK PRACTICES

1. Copy and complete the following sentences

2. What does the term RSI stand for?

3. At what angle should the screen be positioned below the horizontal of the eye?

4. Why was an Australian standard set to deal with ergonomics and personal computers?

5. When should the keyboard layout contain a numeric keypad?

6. What is the recommended height for a desk?

7. When would it be necessary to place a filter in front of the screen?

8. Suppose the room lighting was darker than the lighting of the screen. How would this affect the user? What if it was brighter?

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9. Why is it important to take breaks when working at a computer?

Câu 49:

1. Write down whether the following statements are true or false.

2. What is ergonomics?

3. List and describe three jobs involved in the design and construction of a computer system.

4. What is the recommended height for a chair?

5. Explain the meaning of the term 'user'.

6. List and describe seven jobs involved in the operation and maintenance of a computer system.

7. What is the recommended temperature for the work environment?

8. Why is air-conditioning usually required in a room containing computer equipment?

9. What ergonomic considerations need to be taken into account when designing a job for a computer user?

Câu 50:

computer solution

Stages in developing a computer solution

1 For each of the following statements, select the appropriate stage in developing a computer solution.

2. What are the problem-solving strengths of:

3. State whether a computer or a person would best solve these problems.

4. When is a computer solution needed?

5. List the six stages in developing a computer solution.

6. What is a program?

7. A letter can be written using a pen, a typewriter or a word processor. Do you think the computer is an efficient tool to use for this task? Why?

8. A telephone directory of students in your class can be constructed by hand or using a database. Do you think the computer is an efficient tool to use for this task? Why?

Câu 51: Documentation

Documentation

Problem statement

Method of solution

Results obtained

User manuals

after,

1. Copy and complete the following statements.

2. What is the purpose of documentation?

3. Why is it necessary to explain the logic of a program?

4. What should all documentation contain?

5 Why is documentation often inadequate?

Câu 52: Programming

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Defining the problem

structure of the data *numeric* *alphanumeric*

Processes

Relining the process

Coding the algorithm

syntax,

Testing and debugging the program

Syntax errors

Logic errors *algorithm*

documentation

Intrinsic documentation

Internal documentation

External documentation

Publishing the solution

1. Write down whether the following statements are true or false.

2. What are the benefits of using structured programming?

3. Programming involves three main categories of documentation. Describe them.

4. Explain the difference between syntax errors and logic errors.

5. What is the purpose of a compiler?

6. Why does test data need to cover the range of values that are possible in the problem?

7. What is a 'bug' in a computer program?

8 List the three control structures that a structured program uses?

Câu 53: Programming languages

Logo

BASIC

Pascal

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COBOL

FORTRAN

Constants

Variables

Operators
Assignment statements
Input/output statements

Subprograms

Control structures
1.The vowels have been omitted from these words. Write out the completed words.

2. For each of the following statements, select the correct programming language from the list below.

3. What is a program? ,

4. Name two programming languages that were designed for structured programming.

5. Explain the difference between constants and variables.

6. Why are subprograms useful?

7. In a programming language how is data received from an input device and sent to an output device?

Câu 54: BASIC and Pascal

1. Copy and complete the following statements.

2. A guarded loop is used as a control structure in the name problem. List the commands

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used for this structure in:

3. Which algorithm form resembles the Pascal programming language?

4. List the variables used in the Pascal solution of the name problem.

5. What are the input statements used in:

6. Why is BASIC a good language to teach programming?

7. Why is Pascal a good language to teach programming?

Câu 55: Perspective-Employment

1 Write down whether the following statements are true or false.

2. How have computers affected employment?

3. List any jobs which have been created through the use of computers.

4. What types of jobs do computers replace? Give an example.

5. How can education assist in solving the unemployment problem?

6. What are tile effects of unemployment on our society?

7. Do you think our society can maintain an unemployment rate of between 1 and 2 per cent as was the case in the 1960s. Why?

Câu 56: REVIEW EXERCISE

1 Copy and complete the following statements.

2. List the, six stages in developing a computer solution.

3. Why is documentation important in a computer solution?

4. What is structured programming?

5. Name three programming languages that could be used to teach programming.

6. List seven concepts which are common to all programming languages.

7. What are the advantages and disadvantages of BASIC and Pascal as programming languages?

8. When is a computer solution needed?

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Câu 57:

PERIPHERAL DEVICES

STORAGE

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1. Copy and complete the following statements.

-

2. Why is today's society refer to as the 'Age of 'Information'?

3. How can a microcomputer be used in an information system?

4. Why are peripheral devices important in any information system?

5. What organisations might use a mainframe as part of an information system?

6. Why is optical technology being used for data storage in information systems?

7. List the input devices which are commonly used by information systems.

8. How has information in our society changed the. way we live?

9. Why is a computer system an information system?

10. List the output devices which are commonly used by information systems.

Câu 58: Software

word processor

SPREADSHEETS

Spreadsheets

DATABASE MANAGEMENT SYSTEMS

Databases

Prepared closed databases

Empty flexible databases

database management systems

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1 Write down whether the following statements are true or false.

2. a.Start up a word processing program.

b. Type in the following text.

The amount of information now being produced is so great that it has been called an 'information explosion'. Many businesses and governments have problems coping with the quantity of information they produce. For example, the printed output from a typical mainframe in business is about 1000 kilometres of paper per year.

c. Create a new paragraph after the first sentence.

d. Move the second paragraph up to become the first paragraph.

e. Find and replace these words.

'quantity' with 'amount'

'great' with 'vast'

f. Save this document with the filename of INFOMAT.

3. Create a spreadsheet of music sales using the following table.

Câu 59: Data

Arrays

Files/ records fields

Sequential files

Direct access files

1. For each of the following statements select a matching word or phrase from the list below.

2. What is the purpose of arrays? .

3. What type of storage medium is commonly used for sequential mes?

4. Explain the difference between on-line and off-line data entry.

5. List three ways data can be sorted.

6. Which is the faster way to retrieve data - from a sequential file or from a direct access file?

7. What is the purpose of a subscript in an array?

8. Why is data entered twice in some applications?

Câu 60: Applications

Personnel

payroll

Orders *invoices*

Inventory management

Electronic funds transfer systems,

Airline bookings

Credit ratings

Medicine

1. Vowels have been omitted from these words. Write out the completed words.

2. What are the advantages of a computerised airline booking system?

3. List the type of data stored in an information system for

4. How do point-at-sale terminals transfer funds electronically?

5. Explain how a database system is used to keep track of accounts?

6. What is the purpose of keeping an item inventory?

7. What does data maintenance involve?

8. Do you think that a computer's diagnosis of an illness will be more accurate than a doctor's?

9. Do you think we will become a 'paperless' society because of the use of information technology?

Câu 61: People

systems analyst

System managers

Programmers

Operators

entry personnel

Direct users

Indirect users

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Intermediary users

Managers

1. Write down whether the following statements are true or false.

2. List the people who are involved in providing information services.

3. How can data be abused or misused?

4. Who would be an indirect user of an information system?

5. Do you think people without access to information systems will become 'second class citizens'? Explain your answers.

Câu 62: REVIEW EXERCISE

1. Copy and complete the following statements.

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2. What characteristics do peripheral devices need in an information system?

3. Explain the purpose of the following software

4. Why does a processor in an information system have to be powerful and fast?

5. Explain the difference between sequential files and direct access files.

6. Why is storage an important aspect of any information system?

7. Why is data preparation, validation and verification carried out?

8. What is the difference between searching and sorting data?

9. Describe an application of an information system.

10. Research the employment section of a 'newspaper and determine which provider of information services is in the most demand.

Câu 63:

Hardware

telephone line

cable

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optic

microwave

Packet switch systems

Satellites

Buses

INPUT/OUTPUT DEVICES

modem

acoustic coupler

Facsimile,

1. For each of the following statements, select a matching word or phrase from the list below.

2. What is a communication system?

3. List four media used to link computing devices.

4. Why do packet switch systems provide an efficient way to use a link?

5. Why are fibre optic cables replacing conventional copper wires?

6. What is the, difference between a direct-connect modem and an acoustic couple

7. List the advantages of using satellites as part of a link.

8. What are benefits of shielding copper wires?

Câu 64: Networks

computer network

Local area networks

Fileserver network server.

topology.

Bus networks

Star networks

one

Ring networks

Wide area net-works

Distributed processing

1. Copy and complete the following statements.

2. What is the simplest form of a network?

3. How are local area networks linked?

4. Explain the difference between bus networks, star networks and ring networks.

5. What is a computer network?

6. Where are local area networks commonly found?

7. List any advantages in using a local area network.

8. Why are WANs slower at transferring data than LANs?

9. What is the benefit of distributed processing?

Câu 65: Software

Videotex

Electronic mail or E-Mail

Bulletin boards

network software.

1. Write down whether the following statements are true or false. ,

a .Electronic mail ensures that the computers are using the same protocols.

b. Software that has been modified for a network is called network software.

c. If text to be communicated is written on a word processor first, it reduces the cost.

d. Videotex is an information retrieval service which uses a central computer, telephone lines and modified television sets.

e. Protocols am the set of rules for transferring data.

f. A word processor cannot be used with electronic mail.

g. Bulletin boards provide a means by which users can exchange messages.

h. Network software and a network operating system are used LANs.

i. Mailboxes are storage spaces on a terminal.

2. How can a word processor be used in a communication system?

3. What is the purpose of communication software?

4. List some of the services Videotex provides.

5. What are the advantages in using electronic mail?

6. Explain the purpose of a network operating system.

7. Why do people use bulletin boards?

8 .a. Start up a word processing program.

b. Type in and complete the following text to be communicated.

'Hello, my name is and I am a student at

High School. I am interested in

c .Save this text as MESSAGE 1.

9. Assemble and disassemble a communication system involving a microcomputer, modem and telephone line.

10. a. Start up a communication program.

b. Access or log onto a remote computer which has electronic mail or bulletin board services.

c. Send the file MESSAGE 1 to a mailbox or upload it to a bulletin board.

d. Download (receive) any file from the remote host and save it to your data disk.

e. Log out of the remote host.

f. View this file on a word processing program.

Câu 66: Data

Data transfer *Serial transfer*

Parallel transfer

Asynchronous transmission

Synchronous transmission

Transmission mode

Simplex

Half-duplex mode

Full-duplex mode

Transmission rates

Protocols

hand-shaking

BINARY INFORMATION

ERROR DETECTION AND CORRECTION

1 For each of the following statements select a matching word or phrase from the list below.

2. When are standards required?

3. Explain the difference between the three transmission modes: simplex, half-duplex and full-duplex.

4. Where can errors occur in the transmission of data?

5. What is 'hand-shaking' between two computers?

6. List two methods used to convert characters into binary numbers.

7. Why is serial transfer Used to transfer data over longer distances?

8. Which transmission mode is commonly used by microcomputers?

9. What protocols were used to send the file MESSAGE 1 in the last exercise?

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Câu 67: Applications

and

Videoconferencing

Telecommuting

1. Vowels have been omitted from these words. Write out the completed words.

2. List an advantage and a disadvantage of videoconferencing.

3. What type of people would benefit the most from telecommuting?

4. How can individuals obtain greater access to information?

5. Do you think communication systems are changing our lifestyle? How?

Câu 68: People

1. Write down whether the following statements are true or false.

2 .What is the difference between recipients of information and originators of information?

3. Why can communication software be difficult and frustrating to use?

4. Give an example of an indirect user of a communication system.

5. Why do people take communication systems for granted?

6. Do you think the use of computer communication systems has enhanced human communication?

Câu 69: REVIEW EXERCISE

1. Copy and complete the following statements.

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2. What type of media are used to link computing devices?

3. Explain the difference between a LAN and a WAN.

4. What is the most common topology in a local area network for a mainframe computer

5. Why do organisations use local area networks?

6. What service does electronic mail provide for its users?

7. What is the purpose of a parity bit in ASCII codes?

8 .Explain the difference between synchronous transmission and asynchronous transmission.

9 .List two situations in which parallel transfer is used to transmit data.

10. Describe an application of a communication system.

Câu 70:

Graphics systems

-

graphical user interface

Hardware

INPUT DEVICES

Video cameras

trackball

OUTPUT DEVICES

cathoterlay tube orCRT

refreshed.

plotter

STORAGE DEVICES

Hard disks

Optical disks

RESTRICTIONS

1. Copy and complete the following statements.

ỏ

2. What is a graphic?

3. How are computer graphics used in a flight simulator?

4. What is a graphical user interface?

5. Why is refreshing required in a CRT?

6. Explain the purpose of a display processor in a graphics system.

7. How can a video camera be used in a graphics system?

8. Why is a trackball often used instead of a mouse in computer-aided design applications?

9. When are optical disks used in a graphics system?

10 .How does a graphics plotter present data?

Câu 71: Software

Desktop publishing,

Three dimensional (3-D) graphics

1. Write down whether the following statements are true or false.

2. How do computerised methods of animation surpass manual methods?

3. What is the purpose of desktop publishing software?

4. How do you choose a tool in a drawing or painting program?

Câu 72: Data

'on' 'off'.

pixels,

Memory mapping,

Tones,

Colour

640

400

Raster graphics

Vector graphics

ỏ

1. For each of the following statements select a matching word or phrase from the list below.

2. How is the resolution of a screen determined?

3. Explain the difference between raster graphics and vector graphics.

4. What characteristics of a pixel determine the quality of the image?

5. Why are most images raster graphics?

6. What is a pixel?

Câu 73: Applications

graphic

Charts and graphs

Animated advertising

Computer-aided manufacturing

ENTERTAINMENT

Star Wars *Who Framed Roger Rabbit?*

1. Copy and complete the following statements.

2. How are computers used in a CAM system?

3. Why are games on personal computers approaching the same level of realism and interaction as arcade games?

4. Why are graphs such as line graphs, bar charts and pie charts used by industry?

5 .What is a slide-show effect?

6. List any products that could be designed using a CAD system.

7. Name any movies which you think have used computer graphics.

Câu 74: People

DISABLED PEOPLE

CREATORS OF GRAPHICS

ỏ

1. Vowels have been omitted from these words. Write out the completed words.

2. List people who earn a living from creating graphics.

3. What are voice recognition device's?

4. Why are people increasing their dependence on graphics?

5. What is voice synthesis?

6. List the type of input devices which have been designed for disabled people.

7. Do you think the development of computer graphics has enhanced human communication?

Câu 75: REVIEW EXERCISE

ĐÁP ÁN

Câu 1:

Câu 2:

2+3+4) Refining

sub-system.

Synthesis

Câu 3:

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Câu 4:

Câu 5:

sub-

processes, modules.

hierarchy chart.

Câu 6:

Câu 7:

algorithm.

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Câu 8:

Câu 9:

2) Control structures

sequence/ selection loop.

Câu 10:

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Câu 11:

2.

3.

4)

Câu 12:

1.Write down whether the following statements are true or false..

Câu 13:

1.

2.

3.

4.

5.

Câu 14:

1. Vowels have been omitted from these words. Write out the completed words.

Đ

2.

3.

Câu 15:

Câu 16:

1. **e.** *computer* **a.***microcomputer* **c.** *microprocessor* **b.***tiny* **d.***supervisor*

2.

4 .

Câu 17:

hacker

password

cryptography

Đ

Security

data

people

access

backup

waste

Câu 18: REVIEW EXERCISE

1. Copy and complete the following sentences.

output

printer

hardware

cursor

output

disks

CPU

monitor

input

Đ

monochrome

Câu 19:

scientific

chip

1000

gigabytes

A minicomputers

time-sharing

microprocessor

hardware

2.

Câu 20:

2.

Đ

3.

4. *motherboard*

Câu 21:

1. Copy and complete the following sentences.

QWERTY

Scanners

Dvorak

barcode wand

keyboard

graphics tablet

receive

Touch screens

Joysticks

2.

3.

Câu 22:

1. For each of the following statements select a matching word or phrase from the list below.

2.

3. *plotter*

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Câu 23:

Câu 24:

a.	**e.**	**d.**
c.	**b.**	**f**

Đ

Câu 25:

secondary memory

backup

cassette

sequential

slow

primary

random

Câu 26:

Câu 27:

Đ

Câu 28:

Câu 29:

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Câu 30:

Câu 31:

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Câu 32:

Câu 33:

Câu 34:

Câu 35:

Câu 36:

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Câu 37:

Câu 38:

Câu 39:

Câu 40:

Câu 41:

Câu 42:

Câu 43 :

Câu 44:

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Câu 49:

Câu 50:

Câu 51:

Câu 52:

Câu 53:

Câu 54:

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Câu 55:

Câu 56: Review exercise

Câu 57:

Câu 58:

Câu 59:

Câu 60:

Câu 61:

Câu 62: Review

Câu 63:

Câu 64:

Câu 65:

Câu 66:

Câu 67:

Câu 68:

Câu 69: Review

Câu 70:

Câu 71:

Câu 72:

Câu 73:

Câu 74:

Câu 75:

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TIẾNG ANH
CHUYÊN NGÀNH CNTT

Mã số: 492ANH214

Chịu trách nhiệm bản thảo

TRUNG TÂM ĐÀO TẠO BƯU CHÍNH VIỄN THÔNG 1