

#### 1 SEC '94-PAPER 2B-Q1

A public library has installed a computer to help with the issue and returning of	
books to its members. Each book in the library is assigned a unique book num-	
ber, and each member has a membership card with a unique member number.	
The system uses two main files – the <b>books file</b> contains a record for each book	
in the library, while the <b>members file</b> contains a record of each member.	
a. Mention THREE fields you would expect to find in the members record.	[3]
b. Mention THREE fields you would expect to find in the books record.	[3]
c. Which field would you probably be the key in these two types of records?	[2]

# 2 SEC'94-PAPER 2B-Q4 (CONSULT CHs 4, 5, & 7)

Briefly explain the difference between:

a.	RAM and ROM	[3]
b.	MAIN STORAGE and BACKING STORAGE	[3]
c.	A PRINTER and a PLOTTER	[3]
d.	DECIMAL and BINARY	[3]
e.	A TRACK and a SECTOR	[3]
f.	SEQUENTIAL and DIRECT ACCESS	[3]
g.	A LIGHT PEN and a BARCODE READER.	[3]
_		
_		•

Writing Space for Previous Question			

## 3 SEC'95-PAPER 2A-Q1B (CONSULT CH 9)

Write brief notes on ANY TWO of the following:	
Computer crime	
Data security	
Software piracy	
Computer viruses	[10]

#### 4 SEC '95-PAPER 2A-Q5 (CONSULT CHs 4, 16, 12 & 14)

RST company decides to fully computerize its payroll system. To date, workers sign when reporting for work and before leaving. A data entry clerk then keys in this data, verifies it and updates the masterfile at the end of each day. In the last week of the month salaries are worked out, cheques and payslips are issued, the month's masterfile archived, and a new masterfile is created.

a.	i.	Suggest a suitable input system which eliminates all manual input.	[4]
	ii.	How is this new input system going to effect workers?	[2]
	iii.	What are the advantages of this new system from the administration point of view?	[2
b.	i.	Suggest a suitable file structure for the daily input of data.	F 4
	ii.	Using fully labeled flowcharts or pseudocode, describe how the masterfile is updated at the end of each day.	[4 [4
	iii.	What is meant by <b>archiving</b> the current masterfile and <b>creating a new masterfile</b> ?	[2
	iv.	What type of processing does this application involve?	[2

Writing Space for Previous Question			

#### 5 SEC '95-PAPER 2B-Q5 (CONSULT CHs 2, 6 & 14)

Draw labeled diagrams to show: **[4]** How the main hardware units of a computer – CPU, ALU, CU, input and a. output devices, backing storage and main memory – are connected; How files on a disk may be organised into directories and subdirectories b. [4] (sometimes also called folders); **[4]** The principle parts of a window in a graphical user interface (GUI) c. [4] d. The relation between file, records, fields and items; e. A logic circuit which can switch on a tape-recorder's rewind motor if either the play button is on and the tape reaches the end, or the play button **[4]** is off and the user presses the rewind button.

Writing Space for Previous Question			

# SEC '96-PAPER 2B-Q2 (CONSULT CHs 2, 4, 9 & 11) Briefly explain the MAIN difference between: A BIT and a BYTE [2] A COMPILER and an INTERPRETER [3] A HIGH-LEVEL and a LOW-LEVEL programming language [3] OMR and OCR [3] [3] A LAN and a WAN A MASTER FILE and a TRANSACTION FILE [3]

6

Writing Space for Previous Question			

#### 7 SEC '96-PAPER 2B-Q7 (CONSULT CH 15)

You have purchased a commercial **application package**. The software, which comes on 10 disks, needs to be **installed** before it can be run. The package also includes a **registration form** which you are encouraged to fill in and post immediately. Registered users are promised free **technical support** and cheap **software upgrades**. The company selling the software hopes that this way less people will be tempted to **pirate** their software.

a.	Give TWO examples of application packages.	[2]
b.	What happens during the <b>installation</b> process?	[3]
c.	What particulars are you usually asked to fill in on the <b>registration form</b> ?	[3]
d.	What is technical support?	[3]
e.	What is a <b>software upgrade?</b>	[3]
f.	What is <b>piracy?</b>	[3]

Writing Space for Previous Question			

# 8 SEC'96-P2B-Q8

Various encyclopedias have been available on CD-ROM for many years now.

a.	Besides text and pictures, mention TWO other types of information	[2]
	which are commonly included in a CD-ROM encyclopaedia.	
b.	Why aren't floppy discs suitable for purposes of publishing an encyclopaedia?	[2]
c.	Mention TWO major advantages of having an encyclopaedia on CD-	
	ROM rather than in printed form.	[4]
d.	Mention TWO major disadvantages.	[4]
e.	What hardware is required in order to fully access all the information on a CD-ROM encyclopaedia?	[5]

Writing Space for Previous Question			

# 9 SEC '97-PAPER 2B-Q8

a.	Three terms that are normally referred to in databases are;	
	• Field	
	• Record	
	• File	
Brie	efly explain each of these terms.	[6]
b.	In a database file one field has to be unique.	
	i. Explain why.	[2]
	ii. What is this field normally called?	[1]
c.	A library system is being designed in which TWO of the files will be the BOOKS file and the BORROWERS file.	
	i. Mention <b>THREE</b> fields, together with their type, which you expect to find in the BOOKS file	[3]
	ii. Mention <b>THREE</b> fields, together with their type, which you would expect to find in the BORROWERS file.	[3]
	iii. Mention <b>ONE</b> advantage of having the BORROWERS file sorted by name.	[2]
	expect to find in the BORROWERS file.  iii. Mention <b>ONE</b> advantage of having the BORROWERS file sorted by	

Writing Space for Previous Question			

## 10 SEC '98-PAPER 1-Q3 (Consult CHs 2, 9 & 11)

What is each of the following called? The first one has been done for you:	
A field which uniquely identifies a record in a database: Keyfield	
A low-level programming language using mnemonics:	_
A group of 1024 bytes:	_
A number of interconnected computers:	_
Arranging a set of records into order:	_
Adding a record to the end of a file:	

#### 11 SEC '98-PAPER 1-Q11 (CONSULT CHs 8 & 13)

Provide ONE reason to explain each of the following statements:	
Direct access is faster than sequential access for retrieving a record from a file.	[2]
A modem is required for computer communications over telephone lines.	[2]
Logical errors in a program are more difficult to find than syntax errors	[0]
	[2]

12	SEC '98-PAPER 2A-Q1			
	a. Software piracy is a crime.			
	i. What do you understand by software piracy?	[1]		
	ii. How can software houses fight this crime?	[2]		
	iii. What other measures can be taken to possibly curb this crime?	[2]		
	b. Developing and spreading <b>computer viruses</b> is also a crime.			
	i. What is a computer virus?	[1]		
	ii. How can a computer virus be spread?	[1]		
	iii. Identify some of the possible effects of computer viruses.	[2]		
	iv. How can a computer virus be eradicated?	[1]		
	c. In a school computer laboratory, piracy and computer viruses are a major			
	headache for technical support staff.			
	i. What are the reasons for this?	[2]		
	ii. What possible measures may be taken by the technical staff to reduce	[2]		
	the possibility of these two crimes?			
	iii. Identify three other routine tasks performed by the technical staff in	[3]		
	the school's computer laboratory.			

Writing Space for Previous Question			

#### 13 SEC '98-PAPER 2A-Q5 (CONSULT CH 14)

In an insurance company, updates of vehicle insurance policies are directed to a transaction file VTF. At the end of each business day, a batch process updates the vehicle masterfile VMF.

a.	What is a <b>batch process?</b>	[1]
b.	Name <b>TWO</b> fields of the transaction file VTF, including one which allows updates to the masterfile MTF.	[2]
c.	Mention <b>THREE</b> types of updates which the batch process may perform to the masterfile.	[3]
d.	Using an example of your choice, briefly describe how <b>ONE</b> of the three types of updates you identified in part (c) is performed.	[4]
e.	Draw a pictorial representation of the masterfile update process in general.	[4]
f.	Explain how the update process automatically safeguards against the accidental corruption of the masterfile.	[3]

Writing Space for Previous Question			

#### 14 SEC '98-PAPER 2B-Q8

What is the relation between fields, records and files?	[3]
Explain each of the following types of files.	
Grandfather, father, son files;	
Master file;	
Transaction file;	
Backup file;	
Archive file.	[5x2]
Briefly explain each of the following operations which can be carried out on files:	
Search a record;	
Update a record;	
Sort a file;	
Merge files.	Γ <i>Λ</i> 11
	[4x1]

Writing Space for Previous Question			

## 15 SEC '99-PAPER 1-Q2 (CONSULT CHs 2, 11, 13, 14 & 15)

What is each of the following called? The first one has been done for you:

a.	A group of 1024 bytes: A kilobyte
b.	A group of 1024 Kilobytes:
c.	Where text copied from a document is placed temporarily before it is pasted back:
d.	Combining a wordprocessor document with a list of addresses to produce personalised letters:
e.	A file of changes to be made to a master file:
f.	Step-by-step instructions on how to carry out a process:

#### 16 SEC '99-PAPER 1-Q11 (CONSULT CHs 4, 9 & 13)

Name two of each of the following:		
Types of computer networks.		
1	2	_ [2]
Data access methods		
1	2	_ [2]
Types of documentation.		
1	2	_ [2]
Types of graphics storage formats.		
1	2	_ [2]

#### 17 SEC '99-PAPER 2B-Q7 CONSULT CHs 5, 9, 10, 11& 15)

Give short descriptions of each of the following computing terms, supporting your answers with examples where possible:

[2]

[2]

[3]

[3]

[3]

**[4]** 

Multimedia	
Internet	
Binary, decimal and hexadecimal bases	
Source program, translator program and executable	code.
Field, record, file.	
Accumulator and program counter.	
,	

Writing Space for Previous Question	
·	

### 18 SEC '00-PAPER 1-Q2

a.	Mention <b>TWO</b> precautions you should take in order to safeguard important data on your computer.	
1		[2]
2		
b.	Mention <b>TWO</b> precautions you should take in order to safeguard important data stored on a floppy diskette.	[2]
1		
2.		

)	~-~			(601-61-61-61-61-61-61-61-61-61-61-61-61-61	
	SEC (iii)			(CONSULT CH 9) Inderstand by DATA INTEGRITY?	[1]
	(111)		•	•	
				on and validation are both useful when trying to ensure	[4
		j	ntegrity of data	a. Explain why?	
	(ii) T	wo fu	ındamental type	es of data security are physical security and software	
	(s	ystem	) SECURITY.		
		(a)	Distinguish bety	ween each type of security. Give two examples of each.	[6]
		(b)	"Any security s	system is only as good as the integrity of the people who	[2]
			operate it." Con	mment.	
	(iii) A	A con	nputer virus is a	threat to the normal functioning of any computer	
	5	systen	1.		
		•	What is a comp	nuter virus?	[1]
			·	nputer virus be spread?	[2]
				nputer virus be eradicated ?	[1
		(0)	Tiow can a con	inputer virus de eradicated :	

Writing Space for Previous Question	
·	

## 20 SEC '01-PAPER 2A-Q7 (CONSULT CH 9)

Data security means *keeping data safe* from the various hazards to which it may be subjected.

(i)	Name two possible hazards data may be subjected to. For each possibility mention possible measures to safe guard from such data losses.	[2,2]
Data	integrity refers to the correctness of the data.	
(ii)	Name two possible ways that may result in loss of data integrity. For each suggestion mention actions that can be taken to minimize the loss of data integrity.	[2,2]
(iii)	Developing and spreading computer viruses is a crime.	
(a)	What is a computer virus?	[1]
(b)	Mention two ways how a computer virus may be spread?	[2]
(c)	Identify some of the possible effects of computer viruses.	[2]
(iv)	There exist potential health hazards of working with computers. Discuss.	[4]

Writing Space for Previous Question	
·	

# 21 SEC '02-PAPER 1-Q1 (CONSULT CHs 4, 12 &13)

What is each of the following called?

a.	A field which uniquely identifies a record in a database.
b.	A graphical representation of the logic of a computer program.
c.	A group of program instructions that are repeatedly executed.
d.	A data item in a computer program with a fixed value.
e.	A measurement of the number of pixels displayed vertically and horizontally
	on a visual display unit.

hedule file con atientName ate	ery uses a database tains the following HomeAddress Telephone		ule patient appointments.  DateofBirth  Reasonforvisit	The
atientName	HomeAddress	Gender		
ate	<u></u>			
	Telephone	Time	Reasonforvisit	
.,			ore a single character code. down into THREE smaller f	äelds.
(iii) Sugge	est names for these	THREE ne	w fields.	
				(ii) Suggest a field that could be broken down into THREE smaller f (iii) Suggest names for these THREE new fields.

## 23 SEC '02-PAPER 1-Q3 (CONSULT CHs 7, 11 & 15)

Provide ONE reason to explain the following statements:	
Fixed length records consume more disk space than variable length records.	[2]
A compiled program executes faster than an interpreted program	[2]
A 16 bit CPU is faster than an 8 bit CPU	[2]
An off-the-shelf software program is cheaper than a tailor made software program.	[2]
Random access memory is volatile.	

## 24 SEC '02-PAPER 1-Q13 (CONSULT CH 9)

Answer the following questions related to networking.

i.	In an office, computers are networked. Mention TWO advantages that networked computers have over stand alone ones.	[2]
ii.	Mention one difference and one similarity between a LAN and a WAN?	[2]
iii.	Why are computer viruses more harmful in a networked environment?	[2]
iv.	When data is transmitted across networks it is important to maintain its integrity. Explain the term <i>integrity</i> .	[2]

25	SEC	C '02-PAPER 2A-Q8 (CONSULT CHs 3, 4 & 9)	
	i.	Mention and briefly describe <i>three</i> types of computer crime.	[6]
	ii.	Describe three ways in which data may be protected from corruption	[3]
	Hea	alth problems can occur from using a computer for long periods of time.	
	iii.	Mention <i>two</i> possible health problems. Suggest ways of reducing problem risks.	[4]
	iv.	Mention and briefly describe <i>two</i> different systems in which computers are involved in the payment of purchased goods or services.	[4]

Writing Space for Previous Question	

#### 26 SEC '03-PAPER 1 Q1 (CONSULT CHs 4,8 & 9)

State whether each of the following is TRUE or FALSE.

a. Giving a friend a copy of the database management software you own is an example of software piracy. [1]
b. An image scanner is an input device. [1]
c. Encrypted messages is a way to prevent them from being deleted or lost. [1]

d. A computer virus is a computer program written with a malicious intent and can attach itself to programs.

[1]

......

# 27 **SEC '03-PAPER 1 Q4** (CONSULT CH 13) Distinguish between each of the following pairs: a. Sequential access file and random access file [2] b. Master file and transaction file [2] c. Check digit and range check [2] d. Data integrity and data security [2]

## 28 SEC '03-PAPER 2A Q6 (CONSULT CHs 8, 9 & 15)

A medical clinic uses a network to help in the running of this same clinic.	
(a) What is a network?	[1]
(b) What is a network confided to a single building called?	[1]
(c) Give two benefits of linking the clinic's network to a hospital's network.	[2]
(d) Each employee at the clinic has a computer password and they are advised to change it regularly. Give one reason for this.	[1]
(e) Personal information about patients is transmitted via the network to the hospital. How can confidentiality be protected during transmission?	[2]
(f) Some of the files being transmitted are very large. What software could be used to keep transmission times to a minimum?	[3]
(g) A remote terminal is connected to a central mainframe computer using the telephone lines.	
<ul><li>i. What device is needed at the end of the telephone line?</li><li>ii. What job does this device do?</li></ul>	[1] [2]
(h) Describe TWO types of communication links which could be used to allow computers on different continents to communicate with each other.	[4]

Writing Space for Previous Question	

29	SEC '03-PAPER 2B Q2 (CONSULT CHs 12, 13,14 & 15)	
	(a) Give TWO reasons why large programs are often written in modules.	[2]
	(b) Briefly describe and give example of the three types of errors that a programmer can come across when debugging programs.	[6]
	(c) A program is executed and produces results which are found to be incorrect. Mention TWO different methods the programmer can use to locate a mistake in the program.	[2]
	(d) Distinguish between application software and system software.	[2]
	(e) Give one example of each software mentioned in (d).	[2]
	(f) In an application three generations of the master file are kept. What are these three generations normally called and why are they considered necessary?	[3]

Writing Space for Previous Question	

30	SEC '03-PAPER 2B Q3 (CONSULT CH 4, 7, & 10)	
	(a) Distinguish between serial and direct access storage media.	[2]
	(b) Give an example of a <i>backing storage medium</i> which allows direct access and one which allows serial access.	[2]
	(c) Write down what each of the following abbreviations stand for:  ALU  RAM  ROM  CPU	[4]
	(d) Mention ONE major difference between RAM and ROM and give an example of the use of each.	[3]
	(e) Briefly describe the CPU's fetch-execute cycle	[6]
	<del></del>	

Writing Space for Previous Question	

31	SEC '03-PAPER 2B Q4 (CONSULT CHs 4, & 15)	
	(a) Define the term <i>key field</i> .	[2]
	(b) What would be a suitable key field in a file storing records about cars on hire?	[1]
	(c) Mention TWO software packages that would be of particular help to a secretary working in an office to do his/her work more efficiently.	[2]
	(d) For each software package mentioned in (c) mention THREE facilities it offers.	[6]
	Bar Code readers and Touch Screens are two peripheral devices.	
	(e) State whether each is an input or an output device	[2]
	(f) For each of these devices give ONE application and say why it is suitable to use such a device.	[4]

Writing Space for Previous Question	

## 32 SEC '04-PAPER 1 Q5

5.

Explain the following terms:	
a. Database	
b. Record	
c. File	
d. Sequential File	
e. Direct Access File	
	[10]

#### 33 SEC '04-PAPER 2A Q3 (CONSULT CH 15)

A video rental shop uses a computerised system to store information about videos for rent and about video library members.	
The <i>Customer File</i> stores information about video library members. Each member is identified by a unique member number.	
The <i>Video File</i> stores information about videos for rent. Every record in this file is identified by a unique video number. A 'rental type' field indicates the rental duration which might be of one day, three days or seven days. An 'availability' field indicates whether the video is currently available for rent.	
(a) Suggest <b>with reason</b> , a suitable data type for the following fields of the video file:	[3]
(i) video number; (ii) rental type; (iii) availability.	
The system also includes a <i>Loans File</i> to store information on each rental. Each record in the Loans file stores a member number, a video number and some other information.	
(b) What is the purpose of the member number and the video number in the loans file?	[2]
(c) Mention one other field of the <i>Loans File</i> . (d) Name the <b>TWO</b> files which are modified when a video is returned. Describe the necessary changes in these files.  This computerised system was <b>tailored</b> for this business some years ago. Rental material is now also available on DVDs. The shopkeeper would like to keep the information about the type of medium (video or DVD) on which the viewing material is recorded.	[2] [6]
(e) Explain what is meant by <b>tailored</b> software. (f) How can this new additional information be stored in the <i>Video File</i> ? Indicate any changes to the record structure if necessary.	[2] [2]

Writing Space for Previous Question				

## 34 SEC '04-PAPER 2A Q7 (CONSULT CHs 9 & 14)

An airline company has a number of booking offices spread across a large geo-	
graphical area.	
An on-line, multi-access booking system allows a customer to book a flight	
ticket from any booking office.	
(a) Define the terms <b>on-line</b> and <b>multi-access</b> and state why such an operating	[4]
system is required for this application.	
(b) Briefly describe how a multi-access system works.	[3]
The computers at the various booking offices are networked with the computer	
system at the main office.	
(c) What type of network is this? Justify your answer.	[2]
Security is an important aspect of this system.	
(d) What is security? How does it differ from recovery?	[2]
(e) Briefly describe <b>TWO</b> security measures for this airline booking system.	[4]
(f) Describe a periodic task the administrator must perform to enable recov-	[2]
(f) Describe a periodic task the administrator must perform to enable recovery if necessary.	[2]
	[2]
	[2]
	[2]
	[2]
	[2]
	[2]
	[2]
	[2]
	[2]
	[2]
	[2]

Writing Space for Previous Question				

#### 35 SEC '04-PAPER 2B Q7 (CONSULT CHs 6, 14 & `5)

- (a) What is the difference between *Applications Software* and *System Software*? [2]
- (b) State whether each of the following programs is *Applications Software* or *System* [4] *Software*:
  - (i) word processor;

(v) antivirus software;

- (ii) operating system;
- (vi) a computer game;

(iii)printer driver;

(vii) web browser;

(iv) spreadsheet;

- (viii) disk defragmentation software.
- (c) Name a secondary storage medium that can store both sequential access and direct access files. [2]

Name another medium that can store only sequential files.

(d) Consider these two applications:

[2]

(i) Payroll

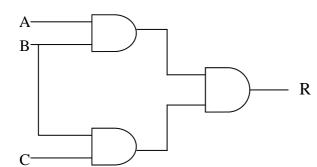
(ii) Airline Booking Reservation.

For **each one** suggest whether sequential access or direct access files should be used.

	A	В
1		Sales
2	Jan	Lm4,177.00
3	Feb	Lm3,625.00
4	Mar	Lm4,310.00
5	Total	

(e) What function would you use in cell B5 to find the total sales of January, February and March? [3]

(f) Consider the following circuit and answer the questions below.



- (i) When A = 0 (i.e. false) what is the [2] value of R?
- (ii) If R = 1 what must be the values [2] of A, b and C?

Writing Space for Previous Question				

#### 36 SEC '05-PAPER 1 Q12 (CONSULT CH 9)

(a)	Give ONE hardware procedure and ONE software procedure used to deter privacy.	
	(i)	
	(ii)	[2]
(b)	Give TWO ways of protecting a computer against viruses.	
	(i)	
	(ii)	[2]
(c)	Give TWO ways how to make sure that confidential data is kept private.	
	(i)	
	(ii)	[2]

## 37 SEC '05-PAPER 2A Q1C, D & E (CONSULT CH 4)

(c) Common storage devices like floppy disks, hard disks and compact disks can be used both as secondary and backup storage.	
(i) State the difference between <i>secondary</i> and <i>backup</i> storage.	[2]
(ii) State ONE reason why secondary storage is used.	[1]
(iii) Name ONE form of secondary storage which can only be written serially.	[1]
(iv) Name TWO secondary mass storage devices which are suitable for archiv-	[2]
ing data.	
(d) Draw a labeled diagram of a magnetic disk clearly showing <i>track</i> and a <i>sector</i> .	[2]
(e) What is meant by a <i>hierarchical directory structure</i> with reference to storing	[2]
files on disk?	[2]
· <del></del>	
· <del></del>	
· <del></del> _	
,	
·	

#### 38 SEC '05-PAPER 2A Q4 (CONSULT CHs 8 & 9)

(a) The following statement appeared in a Computer Magazine:	
"So what's the harm in copying your software for a friend? You may think that	
aren't doing much damage but piracy is a serious issue in the IT industry."	
(i) Name TWO different practical examples of program piracy.	[2]
(ii) Briefly discuss the potential damage of program piracy to businesses that	
develop software.	[2]
(b) Security is becoming a growing concern to most computer users.	
(i) List TWO practical examples of security problems that could occur in the	
internet environment.	[2]
(ii) What is the function of a firewall?	[1]
(c) A network card converts data from a digital format suitable for transmission	
over the network (such as light pulses).	
(i) Name another hardware device used regularly for communication between	
computers.	[1]
(ii) What is the function of this device?	[2]
(d) You subscribe to an Internet Service Provider (ISP), and obtain the following e	
-mail address: lucky.fish@InterMal.co.mt.	
(i) What is <i>e-mail</i> ?	[1]
(ii) Which part of the e-mail address given above is your username?	[1]
(iii) The part .mt refers to Malta. Mention TWO other country abbreviations	
used in an internet address.	[1]
(e) (i) What is a web browser?	[1]
(ii) Name ONE commonly used web browser.	[1]
(iii) What does the acronym HTML stand for and what is its use?	[2]

Writing Space for Previous Question				

#### 39 SEC '05-PAPER 2B Q3

(a) The following	four terms are related t	to databases:		
Archive File	Transaction File	Master File	Backup File	
<ul><li>(i) A file of data necessary.</li><li>(ii) A collection of (iii) An exact cop (iv) A file contain</li></ul>	et term from the list about which is a principal so of records used to update y of a file used in case thing data that is no long required in the future.	urce of information. te a master file. the original file is co	It can be updated as rrupted.	[4] [3] [1]
formation about (i) Mention THE this file. (ii) Define the ter (iii) Suggest a sui	table key field to be use RIEFLY describe FOU	ock. th their type, you wo ed in this file.	uld expect to find in	[8]

Writing Space for Previous Question		
·		

## 40 SEC '05-PAPER 2B Q4 (CONSULT CHs 7, 8 & 10) (a) Define the term *address space*. [2] (b) Communication inside a computer is carried out the system bus which includes the data bus and the address bus. (i) Which of the above two buses has an effect on the overall performance of [1] a computer? (ii) Which of the above two buses determines the address space of the CPU? [1] (iii) If the number of lines in the data bus is 16 and the number of lines in the [3] address bus is 8, what is the maximum addressable space of the CPU? (c) Magnetic tape is said to allow *serial access only* while magnetic disk allows [2] both serial and direct access. Explain. (d) Which of the storage media mentioned in (c) would you think is suitable to [1] store records in a cinema ticket booking system? (e) Define the term *register*. [1] (f) NAME and DESCRIBE the function of TWO registers found inside the CPU. [4] (g) What do the abbreviations **ROM** and **RAM** stand for? [1] (h) Mention one feature that is common to both RAM and ROM. [1]

Writing Space for Previous Question		
·		

## 41 SEC '06-PAPER 1 Q1 ( CONSULT CHs 4, 10, 13 & 14 )

What is each of these called?

(a)	The output device which enables you to make a hardcopy of text and graphics.
(b)	The process of checking whether the data being inputted is correct.
(c)	The system software which isolates the user from the complexities of the hardware.
(d)	The storage medium which stores programs and data which are currently being processed by the CPU.
(e)	Copies of data files which enable restoration of the system in case of system malfunction.

#### 42 SEC '06-PAPER 2A Q1 (CONSULT CHs 4, & 9)

A local bank operates from a head office and has several branches spread across a large geographical area supplying financial services to clients. The computers at the various bank branches are networked with the computer system at the head office.

a)	What type of network is this? Justify your answer.	[2]
gene	branch has a number of computers configured in a star network. The data crated from the various branches and the head office are shared over a disted data system.	
b)	Mention TWO advantages and TWO disadvantages of a distributed data system over a centralised data system.	[4]
c)	Name TWO devices, the first of which is particularly suitable for reading the line of characters at the bottom of bank cheques and the second of which is used to deposit or withdraw money from the bank.	[2]
d)	For ONE of the input devices you have named, mention ONE advantage of its particular use.	[1]
Elec	a's salary is transferred directly to his personal bank account by means of tronic Fund Transfer. He uses Direct Banking to check his account balance to pay his bills from home.	
e)	Define the terms Electronic Fund Transfer and Direct Banking.	[4]
Data	security is concerned with preventing the loss of data.	F 47
f)	Briefly describe TWO security measures for protecting confidential data.	[4]

Writing Space for Previous Question		

## 43 SEC '07-PAPER 2B Q5 ( CONSULT CHs 3, 4 & 15 )

a) How is multimedia valuable in assisting disabled persons in using computer related resources? Give TWO ways.	[2]
b) Define the term <i>software piracy</i> . Give TWO reasons why software piracy is illegal, and TWO counter measures normally taken by software companies, in order to avoid it.	[5]
c) Data Encryption is one way of securing private data. What is Data encryption and how does this help in protecting personal records?	[3]
d) Sitting at a computer terminal for too long can be dangerous. List TWO negative effects of computing.	[2]
e) What is the use of having computer systems at point-of-sale terminals in supermarkets? List THREE advantages.	[3]
f) Why is backup important for businesses? Give TWO reasons.	[2]

Writing Space for Previous Question		