

CA



THE INSTITUTE OF
CHARTERED ACCOUNTANTS
OF SRI LANKA

SUGGESTED SOLUTIONS

07204 – Information Management

Certificate in Accounting and Business II Examination
September 2014

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF SRI LANKA

Answer No. 01

(a) Advantages of the Waterfall model (with respect to Super Holidays Ltd)

- Each phase of development proceeds in strict order, without any overlapping or iterative steps – so, clear development for the company.
- Works well for smaller projects where requirements are well understood – therefore suitable for Super Holidays Ltd.
- It is a linear model and linear models are the most simple to be implemented – simplicity is important for Super Holidays Ltd.
- Documentation is produced at every stage of the Waterfall model development. This makes the understanding of the product designing procedure simpler for managers and staff of Super Holidays Ltd.

Disadvantages of the Waterfall model (with respect to Super Holidays Ltd)

- It is often very difficult for the customers to state all requirements explicitly at the beginning. So, not very suitable for this company.
- Once an application is in the testing stage, it is very difficult to go back and change something that was not well thought-out in the previous stage, particularly when computerisation happens for the first time.
- Limited user involvement. Super Holidays Ltd has to get limited users involved in development.
- System requirements are locked in after being determined which is not suitable for Super Holidays Ltd at all.

Advantages of the Prototyping model (with respect to Super Holidays Ltd)

- Effort of prototype is not wasted as it is always used – good for Super Holidays Ltd to collectively give requirement.
- Increase in speed of delivery of the prototype – Super Holidays Ltd wants to develop it fast, so this is a suitable model.
- Faster than the Waterfall model – more appropriate for Super Holidays Ltd in view of the urgency.
- High level of user involvement from the start – ideal for Super Holidays Ltd's requirement where the managers of all bungalows have to give their requirement.
- Less risky as technical/other problems are discovered early – another plus point for Super Holidays Ltd.

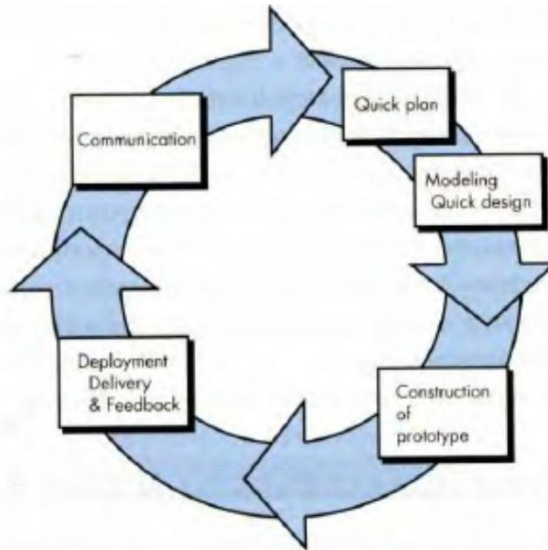
Disadvantages of the Prototyping model (with respect to Super Holidays Ltd)

- Important features may have been left out of the prototype to simplify rapid implementation which can happen to Super Holidays Ltd if care is not taken to identify the important features.
- An implementation has no legal standings. Continual change tends to corrupt the structure of the prototype system.
- Maintenance is therefore likely to be difficult and costly which this company has to carefully look into.
- It is not clear how the range of skills, which is normal in software engineering teams, can be used effectively for this mode of development.

- Languages which are good for prototyping are not always best for the final product. These technical issues need to be carefully determined by the tech team for this company.

(b) **Prototyping Model**

A prototype (a small version of the system) can be used to clear the vague requirements. A prototype should be evaluated with the user participation.



The prototyping paradigm begins with communication. You meet with other stakeholders to define overall objectives for the software, identify whatever requirements are known. Prototype iteration is planned quickly, and modeling occurs. A quick design focuses on a representation of those aspects of the software that will be visible to end users. The quick design leads to the construction of a prototype. The prototype is deployed and evaluated by stakeholders, who provide feedback that is used to further refine requirements. Iteration occurs as the prototype is tuned to satisfy the needs of various stakeholders, while at the same time enabling you to better understand what needs to be done.

- (c)
- (i) **TCP - Transmission Control Protocol (TCP)** is one of the core protocols of the Internet Protocol suite (IP), and is so common that the entire suite is often called *TCP/IP*. TCP provides reliable, ordered and error-checked delivery of a stream of octets between programs running on computers connected to a local area network, intranet or the public Internet. It resides at the transport layer.
 - (ii) **IP - The Internet Protocol (IP)** is the principal communications protocol in the Internet Protocol suite for relaying datagrams across network boundaries. Its routing function enables internetworking, and essentially establishes the Internet. IP, as the primary protocol in the Internet layer of the Internet protocol suite, has the task of delivering packets from the source host to the destination host solely based on the IP addresses in the packet headers.
 - (iii) **HTTP - The Hypertext Transfer Protocol (HTTP)** is an application protocol for distributed, collaborative, hypermedia information systems. HTTP is the foundation of data communication for the World Wide Web. Hypertext is structured text that uses

logical links (hyperlinks) between nodes containing text. HTTP is the protocol to exchange or transfer hypertext.

- (iv) FTP - The **File Transfer Protocol (FTP)** is a standard network protocol used to transfer computer files from one host to another host over a TCP-based network, such as the Internet. FTP is built on a client-server architecture and uses separate control and data connections between the client and the server. FTP users may authenticate themselves using a clear-text sign-in protocol, normally in the form of a username and password, but can connect anonymously if the server is configured to allow it.

Examiners' comments

Majority of the candidates gave good answers for part (a), presenting the advantages and disadvantages of the Waterfall model and the Prototype model separately. However, they did not compare them with the company (Super Holidays Ltd) requirements.

Majority of the candidates gave good answers for part (b) with the diagram. But some of candidates did not understand the Prototype model and provided answers for the System Development Life Cycle (SDLC) - which is wrong. Again, candidates did not consider the Super Holidays Ltd case study.

Answers to part (c) were very poor. Although technical, this section was within the syllabus. Majority of the candidates did not understand the protocols and gave wrong answers.

Answer No. 02

(a) Controls in Network Information Systems

There are many controls in network Information Systems. In this section we are going to discuss following controls:

- Firewalls
- Intrusion Detection Systems
- Antivirus Software

Firewalls

The firewall acts like a gatekeeper that examines each user's credentials before access is granted to a network. The firewall identifies name, Internet Protocol (IP) addresses, applications, and other characteristics of incoming traffic. It checks this information against the access rules that have been programmed into the system by the network administrator. The firewall prevents unauthorised communication into and out of the network, allowing the organisation to enforce a security policy on traffic flowing between its network and other untrusted networks, including the Internet. Super Holidays Ltd has to carefully incorporate firewalls to prevent unauthorised access to their information.

Intrusion Detection Systems

In addition to firewalls, commercial security vendors now provide intrusion detection tools and services to protect against suspicious network traffic and attempts to access files and databases. Intrusion detection systems feature full-time monitoring tools placed at the most vulnerable places which is a necessity for Super Holidays Ltd as they update bookings and handle customer payments as well. The system generates an alarm if it finds a suspicious or anomalous event. Scanning software looks for patterns indicative of known methods of computer attacks, such as bad passwords, checks to see if important files have been removed or modified, and sends warnings of vandalism or system administration errors. Monitoring software examines events as they are happening to discover security attacks in progress. The intrusion detection tool can also be customised to shut down a particularly sensitive part of a network if it receives unauthorised traffic.

Antivirus Software

Defensive technology plans for both individuals and businesses must include antivirus protection for every computer. Antivirus software is designed to check computer systems for the presence of computer viruses. Often the software can eliminate the virus from the infected area. However, most antivirus software is effective only against viruses already known when the software was written. To remain effective, the antivirus software must be continually updated which is important for Super Holidays Ltd as it has real time updating information about customers.

(b) **Steps involved in disaster recovery planning**

1. Identify the scope and boundaries of the disaster recovery plan (DRP). Define the scope of the DRP. It provides an idea for limitations and boundaries of plan. It also includes audit and risk analysis reports for the institution's assets.
2. Carry out a Business Impact Analysis (BIA). What are the major financial losses from the disaster event?
3. Prepare actions to recover for each disaster. The detail actions to be laid down in the plan.
4. Get approval for the DRP from the senior management. Convincing senior management to approve the DRP is a key task.
5. Each business unit needs to understand its role in the plan and support to maintain it. In case of a disaster, each business unit has to be prepared for the action. To recover and to protect the critical systems in business unit, it has to understand the plan and follow it accordingly. It is also important to maintain and help in the creation of a plan for each individual business unit.
6. The DRP project team must implement the plan. After approval from upper management plan should be maintained and implemented. The implementation team should follow the guidelines procedures in the plan. The DRP should be reviewed periodically and the status should be checked.

(c) (i) **TPS - Transaction Processing Systems**

Features:

Batch Processing, Real Time Processing, Time Sharing, Transaction Processing, Performing operational matters, continuous availability, Data integrity, Ease of use, Modular growth, providing information to the MIS, back up procedures, recovery plans

- (ii) **MIS – Management Information Systems - A management information system (MIS)** provides information that organisations require to manage themselves efficiently and effectively. Management information systems are typically computer systems used for managing. The five primary components are: 1) Hardware 2) Software 3) Data (information for decision making), 4) Procedures (design, development and documentation), and 5) People (individuals, groups, or organisations). Management information systems are distinct from other information systems because they are used to analyse and facilitate strategic and operational activities.

- (iii) **DSS – Decision Support Systems - A Decision Support System (DSS)** is a computer-based information system that supports business or organisational decision-making activities. DSSs serve the management, operations, and planning levels of an organisation (usually mid and higher management) and help to make decisions, which may be rapidly changing and not easily specified in advance.

- DSS tends to be aimed at the less well structured, underspecified problems that upper level managers typically face;
- DSS attempts to combine the use of models or analytic techniques with traditional data access and retrieval functions;
- DSS specifically focuses on features which make them easy to use by non-computer people in an interactive mode; and
- DSS emphasises flexibility and adaptability to accommodate changes in the environment and the decision making approach of the user.

(iv) **ESS – Executive Support Systems** - An **Executive Support System** is a class of information systems that supports business and organisational decision-making activities. It is an interactive software-based system made to help decision makers compile useful information from a combination of raw data to identify and solve problems and make decisions.

Its key points are:

1. Improves personal efficiency
2. Speed up the progress of problems solving in an organisation.
3. Facilitates interpersonal communication
4. Promotes learning or training
5. Increases organisational control
6. Generates new evidence in support of a decision
7. Creates a competitive advantage over competition
8. Encourages exploration and discovery on the part of the decision maker
9. Reveals new approaches to thinking about the problem space
10. Helps automate the managerial processes.

Examiners' comments

Majority of the candidates did not consider the controls for the web based information system in part (a) and gave general system controls; the answer should be controls in a web based (network) information system. Candidates should carefully read the question and understand it before answering.

Most of the candidates gave very good answer for part (b). This area is well defined in the study pack and most of the candidates gave similar answers. However, a few candidates misunderstood the question and gave steps of SLC instead of DRP.

Answers to part (c) were also very good. The question is about main “types” of IS. However, some candidates did not consider word “type” and given answers such as supply chain management system, customer return management system, enterprise revenue planning system etc. Once again candidates should carefully read the question and understand it before answering. This area was also well defined in the study pack.

Answer No. 03

- (a) (i) In this era, competitive advantage was accounted for in business and many business and economic theories etc. were established based on competitive advantage. In this context, a radical change on the conception of information took place and information systems were treated as a strategic resource for competitive advantage.
- (ii) The purpose is to ensure the survival and prosperity of the organisation in the future by providing competitive advantages for the organisation. Strategic information systems can be used at all levels of the organisation and it fundamentally changes the firm's goals, products, services, internal and external relationships and alter the way an organisation conducts its business, within or outside.
- (b)
- For most organisations' today, survival is dependent on IS.
 - Key elements of the organisation dimension consist of people, structure, business processes, politics and culture.
 - Organisation has a hierarchy of management levels and specialities. Their structure indicates a clear-cut division of labour and responsibilities. Some are experts trained for different functions.
 - There are formal rules that have been developed over a long period of time for accomplish tasks. These rules guide the employees to execute a variety of tasks. Some of these procedures have been formally documented while others form informal work practices practiced similar to defect to rules or guides.
 - Each organisation has a unique culture or fundamental set of assumptions, values, and ways of doing things that has been accepted over time. Some aspects of these culture can be found embedded in the IS.
 - Different management levels and specialists create different interests and point of views. These different views sometimes result in conflicts and cults. These form the basis for organisational politics. Information systems emanating out of this cauldron of different perspectives, conflicts, compromises and agreements that are a natural part of all organizations.
 - Understanding these different views, specialties, management levels and so on are very important when developing information systems. The unique features of the organisation should be reflected through its IS.

Examiners' comments

Majority of the candidates did not attempt to answer this question. Only a few candidates were able to given correct answers. Candidates may have misunderstood this question as most of the answers were not relevant to the question. Candidates should carefully read and understand the question before answering.

Answer No. 04

- (a) (i) **Multitasking**
Multitasking refers to multiprogramming on a single user operating system such as on a PC. This allows one user to run two or more programs concurrently on a single computer. E.g. Word processing program running (MS Word) while running a database program (MS Access) intermitted.
- (ii) **Virtual Storage**
Virtual storage (Virtual Memory) is a dedicated storage space on the hard disk that the operating system uses in conjunction with Random Access Memory to preserve main memory space “Snap shots” from time to time for re-loading later. This allows to run programs of very large size compared to RAM memory size or more efficient multitasking. When the program is to be executed by the processor, the relevant “Memory portion” is mapped from virtual storage to RAM at that moment.
- (iii) **Time Sharing**
Time sharing is an operating system capability that allows many users to share computer processing resources simultaneously. The CPU spends a fixed (approximately) a fixed amount of time on one program before moving on to the next (on a simple algorithm). The users do not feel that they get only a tiny size of time, intermittedly.
- (iv) **Multiprocessing**
Multiprocessing is the capability of an operating system (OS) that allows linking two or more CPUs to work parallel. The OS can assign multiple CPUs to execute different instructions from one program or from different programs simultaneously. This OS allows to divide work between the CPUs. Multiprogramming uses one CPU for concurrent processing of many programs; multiprocessing uses many CPUS for many programs simultaneously.
- (v) **Networking**
A computer network is a collection of computers linked together in a network topology such as star, parallel, ring, having a server(s) computer and clients computers. To provide services to a network and control it, the server computer has special capabilities called network management. The OS with these capabilities are called Network OS.
- (b) (i) **System Monitors**
Performance monitors and security monitors are two common system support utilities available. Performance monitors are used to monitor the performance and usage of the computer system by monitoring CPU, RAM and Input-output, for its efficient use. Security monitors are used to monitor and control the use of the computer systems and provide warnings/messages and record evidence of unauthorised use of computer resources.
- (ii) **Anti-virus Software**

Anti-virus software are programs which are used to scan for viruses (many types of viruses as commonly called but can be classified as Trojans, Worms etc.) and remove them by deleting, quarantine etc. Anti-virus software has to be kept up-to date by updating the engine and the databases of viruses because viruses are introduced to be undetected by the present software. These anti-virus software could be able to detect malicious changes in the storage disks or memories and correct them as far as possible. There are a few popular brands of anti-virus software in the market but none of these could eradicate all known viruses, and having more than one product active simultaneously also creates many serious issues.

(iii) **Backup**

Backup is the activity of copying files or databases so that they could be restored after a failure or a catastrophe. There are several backup procedures to an external medium – system. Identifying those important files/databases or simply if disks are available, a complete disk to disk backup is possible. Also there are several types of backups such as son-father-grandfather backups; on-site, off-site backups, disaster recovery systems etc.

(iv) **Disk compression**

With these software the space on the hard disks can be economised, can free space found to contain more repetitive characters.

(v) **ScanDisk**

ScanDisk detects most likely errors and the disk surface and corrects them. It can detect, correct and free space on the disk occupied by files with errors. Often ScanDisk runs automatically in the event the operating system is shut down improperly. Users can run ScanDisk at any time to evaluate the hard disk(s).

Examiners' comments

Majority of the candidates were able to answer this question correctly and obtained more than 8 marks. Most of answers are relevant and candidates seemed to have properly understood the question. However, some candidates did not explain the advanced features of operating systems. Some of them interchanged the answer for multitasking and multiprocessing. Explanations were not complete in part (a).

Part (b) answers were better than those of part (a). However, knowledge on ScanDisk was very poor.

Answer No. 05

- (a) (i) eCommerce
Business to Business, Business to Consumer, Business to Government
- (ii) Electronic markets
- (iii) Hosting a web service - information
- (iv) Web advertising
- (v) Web invoicing - delivery
- (vi) eBusiness
- (vii) Electronic payment methods
e.g. Credit cards, digital cash, debit cards
- (viii) eProcurement, eTendering
- (ix) eRecruitment
- (x) eAttendance and leave control
- (b) (i) Higher IT knowledge of competing companies
- (ii) Transaction with bogus/stolen credit/debit cards
- (iii) Losses due to delays in updating the websites
- (iv) Losses due to wrong information provided in the websites.
- (v) Losses due to wrong deliveries
- (vi) Breakdown in the Information System, IT system.
- Sabotage, malicious attacks
- (c) (i) Update the IT knowledge (Technical and Commercial) within the company frequently
- (ii) Keep vigilant about latest ways of committing eBusiness offences within the country/internally and update the relevant staff with latest ways of checking/evade such offences in the company system.
- (iii) Maintain a list of bogus credit cards/debit cards, updated almost daily, for reference of the payment approving staff.
- (iv) Employ a dedicated webmaster to keep the company website updated almost daily.
- (v) Deliveries made to be checked/approved by more than two staff members to direct those to correct customers.
- (vi) Obtain connections/links of many (at least two) Internet Service Providers (ISP) to keep dual/backup Internet services to enable customers to access company website easily.
- (vii) Increase the bandwidth of Internet services.
- (viii) Maintain a disaster recovery centre (backup) for the company website
- (ix) Built-in good firewalls etc. to avoid any hacking into the company website.
- (x) Deploy the company internal auditor to check this system frequently.
- (xi) Frequently review this system by the top management/board of directors and find/initiate improvement to reach international standards.

Examiners' comments

Majority of the candidates gave correct answers for part (a) but explanations were not given as expected. Most of the answers were relevant to the question.

Some candidates did not give answers for part (b). Candidates were expected to give risks/trends for business methods identified in part (a). Most of them gave general threats, whilst some gave irrelevant answers to this question.

Remedial actions were given for part (c) but they were not explained. Candidates should carefully understand the wording of the question before answering.

Answer No. 06

(a) Advantages

(i) Written by the company IT staff

- Very low cost of production of application software
- Developers are fully aware of company needs
- Additional hardware needed will be minimum/marginal
- No licenses necessary to use

(ii) Bought "off-the-shelf"

- Readily available to purchase
- Can find a product to suit the price for the company
- Features of the product can be examined before purchase
- Best software development features will be built in

(iii) Tailor made for the company

- Development will take care of all the needs of the company
- Can build-in certain features not available in ready-made ones
- Local languages can be used
- Performance of the package will be better than in (i)
- Expertise knowledge can be used to develop

(b) Disadvantages

(i) Written by the company IT staff

- Software engineering quality and performance not up to standard
- Bugs can be present giving unnoticed serious errors
- Not tested and verified software by certifying bodies
- If the in-house programmers leave the company maintenance will be at jeopardy
- May not be able to interface/upload/download with other software

(ii) Bought "off-the-shelf"

- May not be able to find a product to suit the company needs
- Cannot customise to suit the company needs
- Has to pay license fees for continuous use
- Updates has to be purchased

(iii) Tailor made for the company

- Will take a long time for system studies etc. to prepare the software
- Cost is higher
- Maintenance has to be contracted to the developers

- (c)
- (i) Protect all passwords, confidential numeric keys and other data in order to prevent them reaching hackers
 - (ii) Encryption to ensure the security of data during transmission. This involves a translation of data into secret code – cipher text.
 - (iii) Authentication – a technique to make sure that a message has come from an authorised sender. Use a secret algorithm agreed between the sender and recipients of data.
 - (iv) System should built firewalls to prevent unwelcome intrusions into the company system. A determined hacker may be able to by-pass even these.
 - (v) Dial-back security – requiring the person wanting access to the network to dial it and identify themselves first. The system can dial the person back on their authorised number before allowing them access.
 - (vi) All attempted violation of security should be automatically logged and the log checked regularly. Repeated violations which make some part of the system, automatically disconnected with alarms.
 - (vii) All transactions to be acknowledged through other media such as emails, sms etc. to the relevant stakeholders.
 - (viii) Use a very reliable Internet service provider(s)
 - (ix) Use very reliable international payment gateways.
 - (x) Maintain a strong Internal Audit team to sort out any complaints, irregularities and suspicious instants

Examiners' comments

Majority of the candidates understood parts (a) and (b) well and gave correct answers. However, majority of the candidates did not properly understand part (c) and answers were not at a satisfactory level. A few candidates interchanged advantages and disadvantages for each way of selecting the software package in parts (a) and (b).

However majority of candidates were able to score more than 10 marks out of 15 marks.

Answer No. 07

- (a) (i) Operational Level
(ii) Management/Tactical Level
(iii) Strategic Level
- (b) (i) Manufacturing IS example

System	Description	Organisational level
Machine control	Control the actions of machines and equipments	Operational
Production planning	Decide when and how many products should be placed	Management/Tactical
Facilities location	Decide where to locate new production facilities	Strategic

- (ii) Sales and Marketing IS example

System	Description	Organisational level
Order processing	Enter, process and track orders	Operational
Pricing analysis	Determine prices for products & services	Management/Tactical
Sales trend forecast	Prepare 5 year sales forecast	Strategic

- (iii) Human Resource Management IS example

System	Description	Organisational level
Training & development	Track employee training skills and performance appraisal	Operational
Compensation analysis	Monitor the range and distribution of employee wages, salaries and benefits	Management / Tactical
Human resource planning	Plan the long term labour force needs	Strategic

- (iv) Finance and Accounting IS example

System	Description	Organisational level
Accounts receivable	Tracks the money owed the firm	Operational
Budgeting	Prepare short-term budgets	Management/Tactical
Profit planning	Plan long term profits	Strategic

Examiners' comments

Almost all the candidates correctly answered part (a). Majority of the candidates correctly answered for part (b) but did not give correct examples for each level. Most did not give the correct description for each system as well.

Candidates' knowledge on the subject area was very good. Most obtained more than 10 marks out of 15 marks.

Answer No. 08

(i) **Bandwidth**

Bandwidth describes the amount of information that can be passed through a communication channel in a given amount of time i.e. the capacity of the channel. The bandwidth is expressed in bits per second (bps), Kilo bits per second (Kbps), Mega bits per second (Mbps), Giga bits per second (Gbps). Bandwidth is a measure needed to estimate the number of receiving equipment which could be connected to a channel.

(ii) **Twisted Pair Cables**

Twisted pair cables comes in two varieties, shielded and unshielded. Unshielded twisted pair (UTP) is the most popular and is generally the best option for general networks (Cat5) of offices and homes. UTP cables can transmit digital signals over about 100m, and beyond that limit signals become poor. Networking using UTP is fairly easy. The price of 1m cable is about Rs. 40.

(iii) **Fiber Optic Cables**

Fiber optic cables consist of a centre glass core surrounded by several layers of protective materials. It transmits light rather than electronic signals eliminating the problems of electrical interference. This makes it ideal for certain environments that contain a large amount of electrical interference. Fiber optic cables have the ability to transmit signals over much longer distances than coaxial or twisted pair cables. It has the capability to carry information at vastly greater speeds and to serve services such as video conferencing and interactive services. Fiber optic cabling is expensive and implementation is difficult and requires special skills.

(iv) **Microwave transmission**

Electromagnetic waves having frequencies between 1 to 300 GHz are called microwaves. Microwaves go on straight lines and when transmitted on earth surface, only line-of-sight is followed without taking the curvature and hence need transmission and reception equipment to be on line-of-sight. Therefore, having tall antennas, longer distances can be covered on the earth's surface. Micro waves are uni-directional and can be narrowly focused to a target. To increase the coverage distance of a system, repeaters can be used.

Microwaves are very useful for unicasting communication. Therefore, used in cellular phones, satellite networks and wireless LANs.

(v) **Personal Area Networks (PANs)**

A PAN is a computer network used for communication among computer devices, including telephones and digital assistants, in proximity to an individual's body. The reach of a PAN is

typically a few meters. PANs can be used to communicate among devices themselves, or for connecting to higher level networks, uplink to the Internet. PANs can be wired or wireless.

(vi) **Extranet**

An extranet is a computer network that allows controlled access from the outside for specific business or educational purposes. Extranets are extensions to, or segments of private intranet networks that have been built in many corporations for information sharing and eCommerce. The level of access to the resources within the network can be set to different levels for individuals or groups of outside users. Access can be based on a username and password.

(vii) **Internet Protocols**

To connect computers – hosts on the Internet communication protocols are necessary.

TCP/IP (Transmission Control Protocol/Internet Protocol) are a suite of communication protocols available for every major kind of Operating System.

IP takes care of the communication with other computer and it is responsible for sending the packets to the correct destination.

HTTP - Hypertext Transfer Protocol manage the requests and responses over WWW.

FTP - File Transfer Protocol manages the file transfer over the Internet.

Examiners' comments

Most of the candidates did not attempt this question. However, majority of the candidates who attempted the question gave correct answers and obtained more than 8 marks out of the 15 marks. Some candidates gave unclear and irrelevant answers. The subject knowledge of candidates was not at the expected level and some candidates interchanged twisted pair cables and fibre optic cables.

Notice of Disclaimer

The answers given are entirely by the Institute of Chartered Accountants of Sri Lanka (CA Sri Lanka) and you accept the answers on an "as is" basis.

They are not intended as "Model answers", but rather as suggested solutions.

The answers have two fundamental purposes, namely:

1. to provide a detailed example of a suggested solution to an examination question; and
2. to assist students with their research into the subject and to further their understanding and appreciation of the subject.

The Institute of Chartered Accountants of Sri Lanka (CA Sri Lanka) makes no warranties with respect to the suggested solutions and as such there should be no reason for you to bring any grievance against the Institute of Chartered Accountants of Sri Lanka (CA Sri Lanka). However, if you do bring any action, claim, suit, threat or demand against the Institute of Chartered Accountants of Sri Lanka (CA Sri Lanka), and you do not substantially prevail, you shall pay the Institute of Chartered Accountants of Sri Lanka's (CA Sri Lanka's) entire legal fees and costs attached to such action. In the same token, if the Institute of Chartered Accountants of Sri Lanka (CA Sri Lanka) is forced to take legal action to enforce this right or any of its rights described herein or under the laws of Sri Lanka, you will pay the Institute of Chartered Accountants of Sri Lanka (CA Sri Lanka) legal fees and costs.

All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior written permission of the Institute of Chartered Accountants of Sri Lanka (CA Sri Lanka).

NOT FOR SALE