Chapter 10:

Hyperlink : word/phrase or image which when clicked links to another document/page/website.
Https : Set or rules or protocols.
.uk : Domain is registered in the UK
/portfolios : The folder in which the work is stored on the hothouse's server
hothouse-design: the domain name that company has purchased

Spam emails :
 -Junk email
 -Unsolicited email
 -Can consist of unwanted adverts

Why spam emails need to be prevented :
-Spam may contain spyware/phishing
-Spam may spread malware/viruses
-The spam email fills the inbox and stops other emails
-May attempt to solicit personal data/bank details

How to prevent spam :
-Don't opt in to marketing emails
-Delete accounts you no longer use
-Never reply to a spam email
-Use a spam filter
- Safe sender's list

How to identify spam :
-Generic greeting
-Incorrect spelling and grammar
-plain text
-suspicious attachments
-request for personal information

Personal Data:
-Name -Mobile phone number
-Address -Email address
-Gender
-Date of birth

Emails :
An email can be used to send a message to many people at the same time.
Attachments may have to be compressed to be sent via email.
Emails can be used to send legal documents.
In order to send an email back to the sender without retyping the address; reply is used.

Data Protection Acts :

Data must be processed fairly and lawfully
Data must be used for the purpose it was collected for
Data must be adequate and relevant to the purpose it was collected for
Data must be kept up to date and accurate
Data must not be kept longer than necessary
Data must be processed within the rights of data subjects
Data must not be moved to any other country that is not protected by a data protection act
Must allow access to data

Explain how he would assess the reliability of the websites where he has found information.

If site has excessive advertising it could be unreliable
If the advertising is related only to its own products it could be unreliable
The final part of a URL can help to identify reliability
Examples .ac…, .gov, .org, .edu government // academic sites are usually fairly reliable
Can compare information from other websites to see if it is reliable
If site is endorsed by reliable/reputable people/organisations it could be accepted as being reliable // If it has links to other reliable sites/ sites which have testimonials it is usually reliable // If it has testimonials that can be confirmed it is likely to be reliable
If the author's credentials are good, it is likely to be reliable
If information is comparable to information from reliable/authenticated text books it is likely to be reliable
If the date of the last update was a long time ago it is likely to be unreliable
Sites which have grammatical/spelling mistakes are likely to be unreliable
Compare information from text books/experts to see if the results are similar
If it has been recommended by teachers, it is likely to be reliable
If there is a contact page with a real postal address that can be confirmed then it is likely to be reliable
URL contains https/padlock

Explain what is meant by software copyright

Protection of software from being downloaded, copied, or borrowed…
…without the owner's consent
Protects the author of the software

Apart from the reliability of information, discuss the benefits and drawbacks of students using the internet to carry out research.

Benefits
Using a search engine means that the data can be found quicker
Internet has vast amounts/wide range of information
Data tends to be up to date
Students can research from home/on the move/anywhere
Information is in digital form therefore easier to send/use in documents

Drawbacks
The internet is not regulated
Danger of accessing inappropriate websites
Can take a lot of time to find relevant information
Need to have internet connectivity
Searching techniques needed
Copyright information could be plagiarised
Data found on websites may be false
Data found may be biased
Viruses and malware could be uploaded
Danger of students using the internet for other things not research

Intranet vs Internet

The internet is a public network whereas an intranet is a private network/restricted access
An intranet is policed or managed whereas the internet has no rules
The data on an intranet is moderated whereas the internet is not moderated
An intranet is more secure than the internet
Internet has greater amount of information than an intranet
An intranet has restricted access/private network therefore public cannot gain access/the internet is public access
The intranet is protected by passwords/More chances of hacking on the internet
The intranet has reduced unauthorised access to material
The material may be sensitive on the intranet
Intranet only used in the organisation/internet is world wide
An intranet will only contain relevant information for the company
The company has more control of data on an intranet
An intranet is policed or managed/the internet has no rules
The data on an intranet is moderated/the internet is not moderated

Drawbacks
Loss of control of the data…
…as the data is controlled by a data storage provider
…the user needs to be able to trust the service provider and its staff
…security issues with the storing of the data with the provider
…fire/flood/electricity spikes can affect data without the user knowing
If data is not encrypted…
…can lead to security issues due to loss of control/hacking
If connection is lost then the cloud cannot be accessed…
…data could be lost due to this
If there is a mass/lot of data the data could be split over several servers…
…may have problems retrieving the data
…may lead to security issues
…data may be lost during the saving process

Describe the advantages and disadvantages of policing the internet.

Advantages
Helps to prevent illegal materials from being shown
Helps to prevent pornography (for minors)
Helps to prevent discussion groups that incite hatred, racism, etc
Ensure copyright laws are enforced
Remove the Dark Net
Safeguards the vulnerable

Any **four** from:
Disadvantages
Unsuitable material is easily available in other ways
The rise of mobile communications lessens the impact of the internet
Freedom of speech is restricted
Very difficult to enforce as the internet spans continents

Blog :

Regularly updated
Website or web page
Run by an individual or small group/owner can only edit it
Written in an informal or conversational style
Online journal/diary/personal opinions

Wiki :

A website or database
Collaboration by a community of users/members of a group
Allowing any member to add and edit content.

VOIP:

Voice Over Internet Protocol
Method for the delivery of voice communications over Internet /Internet
Protocol/ IP networks
Examples: IP/internet/broadband telephone/broadband phone service.

State the main purpose of a web browser
A web browser views information on the internet/Views webpages/websites

Explain the ICT term cloud.

Cloud is large groups of remote networked servers
They allow centralised data storage

Blog is website/Wiki is software or a website.
Blog is a personal journal or someone's opinion/A wiki is usually objective.
Blog has a single author/A wiki has many authors.
Blog is based on the author's personal observations.
Both use links to websites.
Blogs are written in reverse date order/Wiki has a structure determined by content and users.
Only an author can edit a blog or readers can only add comments to a blog/A wiki can be edited
by any member of the group.   [4]

Describe the ways software can be protected from piracy

When the software is bought it comes with a unique activation code...
...this can only be used once and has to be typed in
..on a limited number of machines

Use of holograms...
...this shows that the software is a real copy
...holograms cannot be photocopied

Use of licence agreements
The purchaser fills in a licence agreement
...and agrees to abide by the rules

Execution of the encryption code requires a key to run

Use of a dongle
Guards hardware / software modules that have not been tampered with in any way

Digital signature on the CD

Explain the purpose of an intranet.

Private/confidential data stays within a company/organisation/school
To store relevant/up to date information about the organisation available to workers
To facilitate communication/collaboration between workers/students/teachers
Make it easier to access company specific applications.
Restrict access to certain sites of the internet/regulate access to the internet
Restrict access for certain employees

Give four reasons why an internet search to find relevant information is not always fast

Computer might be infected with spyware detecting key presses which slows down data transfer speeds over the internet
Computer might be infected with viruses taking up memory and limiting bandwidth.
If the computer's memory is close to full, data transfer speed over the internet can slow down considerably
The search might be too general giving irrelevant information as well as relevant information
Search providers add targeted marketing adverts from companies to the search results/ your search results are gathered to target further marketing/advertising   [4

Describe what is meant by an intranet.

Internal restricted access network/secure network
Uses same protocols as the internet
Private network
Used within an organisation eg school
Limited resources

Describe what is meant by the internet

Public network/not policed
International network of networks
WAN/wide area network
World wide/global/international
Public information system
web/email/gophers/social networking/video conferencing is part of the internet

Explain what is meant by personal data and why it should be kept confidential and secure.

Personal data is data relating to a living individual/person.
The person can be identified (either) from the data (or from the data in conjunction with other information).
Allow one mark only for any example such as: name, address, date of birth, place of birth, bank details.

The data will have the name attached therefore it needs protecting.
The data is confidential as it links directly to the person.
The data can be sensitive:
Allow one mark only for any example, e.g. racial, ethnic, medical, religious, relating to a trade union, mental health, sexual, relating to criminal offences
If someone gets access to the data then they can use the information to attack the person.
Needs to be kept confidential so the data cannot be linked to a person.

Information on the internet can sometimes be unreliable. Discuss ways you could minimise the chance of finding unreliable information when searching the internet.
avoid using information from sites that have excessive advertising
avoid using sites where the information from sites where advertising is related only to its own products…
avoid sites where the date of the last update was a long time ago…
avoid using wikis/sites which the user can edit
avoid using blogs/sites which are clearly the owner's point of view/social networking sites
Avoid using sites which have grammatical/spelling mistakes
Don't just rely on using first website you come to in the results of using a search engine

use information from sites where responsible bodies have endorsed the site/sites which have links to other reliable sites/sites which have testimonials
use sites where the author's credentials are good
use sites which have .ac… , .gov, .edu as the final part of the URL/only use government/academic sites
Compare information from different sites/ reliable/authenticated text books to see if the results are similar
Ask teachers for advice on a site

An intranet is a computer network
Exists usually within one organisation/school
Meets the internal needs of an organisation/school
Can be expanded to become an extranet
Intranet is private
Intranets tend to be policed/managed
Intranet has an extra layer of security
Data found in an intranet is likely to be more relevant to the students' needs

Give four benefits of using social networking sites.

Easy to keep in immediate contact with friends/make new friends
Easy to communicate to more than one friend/to communicate with people overseas
Can search for people who you've fallen out of touch with
Easy to arrange meetings/visits to cinemas/theatre
Can share photographs/videos/images/opinions/views

Discuss the advantages and disadvantages to Ajit using the text book rather than the internet.
Advantages
No danger of accessing inappropriate information
Relevant information can be found quite quickly
Don't have to worry about having to have internet connectivity/computer/phone line/modem
Book will be less biased/more reliable as teacher has recommended it
Index makes searching more efficient

Disadvantages
Book has limited amounts of information
Can be slower to find relevant information than using a search engine
Books can go out of date quickly/difficult to update a book
Books don't have multimedia to help explain information
Easier to detect plagiarism

Give three reasons why some companies have intranets
It is possible to prevent employees accessing undesirable websites
They can ensure that available information is specific to their needs
It is easier to make sure confidential messages stay within the company
There is less chance of company computers being hacked

Microblog :
Three from:
– It is a form/type of blog
– Shorter in length than a normal blog
– Consist of short sentences
– Posts are called microposts
– Accessed by subscribers