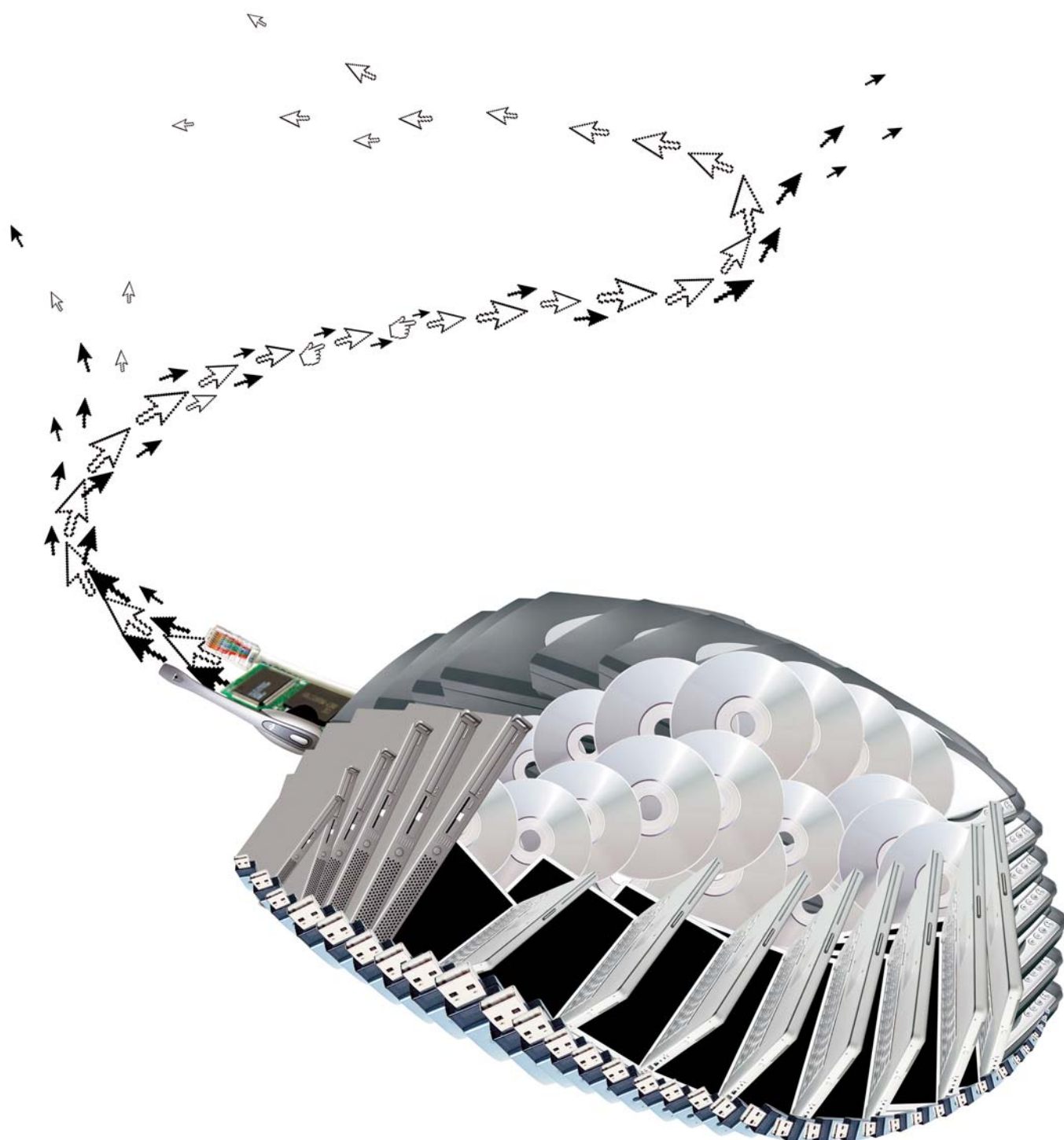


SPECIMEN MARK SCHEME

UNIT 1 - THE POTENTIAL OF TECHNOLOGY





Level 2 Diploma Principal Learning

Information Technology INF2U1

Unit 1

The potential of technology

Specimen Mark Scheme

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting, they are required to refer these to the Principal Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

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General Notes for Examiners

The use of brand names in answers will NOT gain any credit.

Standard of English

Candidates spell, punctuate and use the rules of grammar with almost faultless accuracy.	(3)
Candidates spell, punctuate and use the rules of grammar with considerable accuracy.	(2)
Candidates spell, punctuate and use the rules of grammar with reasonable accuracy.	(1)

Use of appropriate vocabulary

Candidates use vocabulary and specialist terms adeptly and with precision.	(3)
Candidates use most vocabulary and specialist terms appropriately.	(2)
Candidates use some vocabulary and specialist terms appropriately.	(1)

Examiners: the answers given in this mark scheme are exemplars. Credit must be given for other correct answers not given in the mark scheme. Please refer to Team Leaders where there is any doubt.

Section 1: The impact of ICT

1(a)	<p>Any sensible answers</p> <p>e.g. To hold business meetings between people at remote locations. (1 mark) This would not incur travel expenses or other expenses associated with face to face communication (1 mark)</p> <p>e.g. To carry out training or instruction to employees. (1 mark) This would be much cheaper to do than face to face training sessions where all employees had to be in one place at a set time. (1 mark)</p> <p>e.g. Collaboration between experts in a particular field from different locations. (1 mark) These people are usually very busy and so would not have the time to travel to meetings. They could collaborate together much more easily and cheaply using this technology. (1 mark)</p> <p>e.g. Allows a business to obtain new clients in a professional manner, regardless of their location. (1 mark) Clients do not need to travel large distances to meet with key employees. Key employees, who are likely to be very busy, do not need to travel to meet new clients in remote locations as often. (1 mark)</p>	(4)
1(b)(i)	Any sensible answer, e.g. to record an interview for the website, to record a piece of music to use as background on the website.	(1)
1(b)(ii)	Any sensible benefit. Benefits may be in relation to saving time, immediate delivery of information, saving money, being able to achieve a wider audience. Simply saying “quicker”, “easier”, “cheaper”, is not sufficient. They must be explained in relation to the benefit to the magazine publisher.	(1)

Examiners: the answers given in this mark scheme are exemplars. Credit must be given for other correct answers not given in the mark scheme. Please refer to Team Leaders where there is any doubt.

1(c)	<p>Possible functions are:</p> <ul style="list-style-type: none"> • They prevent unauthorized access to information resources • Barrier between a protected network and an unsecured network • Controlled access to systems • Concentrated security • Logging and statistics on network use and misuse • Policy enforcement <p>The benefit MUST be related to the chosen function and must be a benefit to '<i>Shout About It</i>'.</p> <p>Any sensible answer:</p> <p>e.g. If '<i>Shout About It</i>' did not have the use of a firewall, hackers could easily get access to their computers and steal their data.</p> <p>e.g. By using a firewall the management can keep a record of exactly what each employee has done on the Internet.</p> <p>Simply saying 'more secure', 'faster', without saying what is more secure or faster should not be awarded marks.</p>	(1)
1(d)	<p>Any sensible answers.</p> <p>e.g. The firewall currently prevents any outside traffic from entering the internal LAN of '<i>Shout About It</i>' meaning that Jessica will have no access to her files from home.</p> <p>e.g. The magazine do not have any mobile computers and she would be unable to take her office PC home. Therefore, she would need to buy a PC herself which she may be unwilling to do.</p>	(2)
1(e)	<p>Any sensible answers.</p> <p>e.g. They may not have the technical expertise within the business to manage mobile computers effectively.</p> <p>e.g. The management may be very worried about mobile workers bringing viruses into the internal LAN.</p> <p>e.g. The management may be worried about their copyrighted material being lost/stolen when stored on mobile computers.</p>	(2)

Examiners: the answers given in this mark scheme are exemplars. Credit must be given for other correct answers not given in the mark scheme. Please refer to Team Leaders where there is any doubt.

Section 2: Technology and communication

2(a)(i)	Any sensible answers. e.g. SMS/text message, via a website, video conferencing, email, telephone, face to face meetings.	(3)
2(a)(ii)	<p>Any sensible answers But they MUST be related to ONE of the communication methods given in 2(a)(i)</p> <p>e.g. Communicating with a supplier via their website will allow them to gather information at a time convenient to the business, even if the supplier is closed.</p> <p>e.g. The supplier can publish information on its website once and know that it can be read by all of its clients. This will be much cheaper than sending everyone a leaflet in the post.</p>	(2)
2(a)(iii)	<p>Any sensible answer.</p> <p>e.g. they can reach a wider audience than via other communication methods.</p> <p>e.g. a blog is more interactive than other methods so the readers will feel more involved.</p>	(1)

Examiners: the answers given in this mark scheme are exemplars. Credit must be given for other correct answers not given in the mark scheme. Please refer to Team Leaders where there is any doubt.

Section 3: Key components of a New Technology System

3(a)	Any sensible answer. The marks are given as follows: 1 mark for stating that it involves a group of computers being connected together and 1 mark for stating that the network is over a small geographical area.	(2)
3(b)	Any sensible answer. e.g. Allow the sharing of computer files efficiently. Allow the sharing of printers efficiently. Make internal communications possible. Manage data, local communications, and computing equipment.	(2)
3(c)	Any 2 of the following: <ul style="list-style-type: none"> • Computers • Network interface cards • Networking media • Network devices <p>Allow any answer that can be interpreted as one of the above generic items. E.g. network switch would be acceptable as an example of a network device.</p>	(2)
4(a)	Any sensible answer BUT the points MUST be related directly to the question and must be explained in the context of the project aims. 1 mark per valid problem described up to a maximum of 3 marks.	(3)
4(b)	Any sensible answer e.g. reconfigure firewall to allow Jessica to access her files; allow Jessica to access her email from outside the office; issue Jessica with a laptop; allow Jessica to edit the website from home; use a digital camera to make putting pictures on the website easier 1 mark per valid change stated up to a maximum of 3 marks.	(3)
4(c)	Any sensible answer. The answers MUST be related to the changes chosen in part (b) and MUST explain how they would improve the efficiency of the 'Shout About It' business. 1 mark per valid explanation up to a maximum of 3 marks.	(3)
4(d)	Any sensible answer e.g. staff will be able to create their articles and email them into the office from the exhibitions; staff will be able to complete work outside of office hours; staff will be able to communicate with each other more efficiently; staff will be able to keep the website updated more frequently. 1 mark per valid benefit up to a maximum of 3 marks.	(3)

Examiners: the answers given in this mark scheme are exemplars. Credit must be given for other correct answers not given in the mark scheme. Please refer to Team Leaders where there is any doubt.

4(e)	<p>Any sensible answer.</p> <p>Readers : e.g. The website may be updated more frequently.</p> <p>Galleries : e.g. Galleries will be able to contact the staff even when they are out of the office.</p> <p>Artists : e.g. Artists will be able to promote their work more quickly as the staff will be able to get the articles and podcasts live on the website more quickly.</p>	(3)
4(f)	<p>Any sensible answer.</p> <p>This should summarise the points made in the previous 5 sections and should be written in such a way that it is clear what the recommendations are.</p> <p>The conclusion must summarise the recommendations made earlier. (1 mark)</p> <p>The impact of the recommendations to '<i>Shout About It</i>' must be explained. (1 mark)</p> <p>The impact of the recommendations to Jessica must be explained. (1 mark)</p>	(3)