

**INFORMATION TECHNOLOGY IN A GLOBAL SOCIETY
STANDARD LEVEL
PAPER 2**

Friday 23 May 2003 (morning)

2 hours

INSTRUCTIONS TO CANDIDATES

- Do not open this examination paper until instructed to do so.
- Answer Section A and two questions from Section B.

SECTION A

Answer **all** parts of the question.

- There was tremendous growth in the access of online news and information sources in the period from July 2000 to July 2001. The following table indicates the growth of some of the major sites.

Growth of Online News Sources			
	Rate of growth from July 2000 to July 2001	Minutes online per session in July 2001	Minutes online per session in July 2000
<u>www.WashingtonPost.com</u>	50 %	7.7	6.4
<u>www.LATimes.com</u>	50 %	–	–
<u>www.NYTimes.com</u>	66 %	8.2	6.8
<u>www.CNN.com</u>	83 %	–	–
<u>www.ABCnews.com</u>	25 %	–	–
<u>www.MSNBC.com</u>	14 %	6.1	4.8

The survey also indicated that the majority of the world wide web news audience is people in their 30s.

However, in spite of the growth in the number of online readers, accessing online news sources still lags behind the number of viewers and readers of older media.

Some news websites such as the www.NYTimes.com and the www.WashingtonPost.com have more online readers than for their printed versions. Other online newspapers either require subscription fees or provide the online service free to the readers who subscribe to their paper versions.

[Source: adapted from The New York Times, August 27, 2001]

- State **two** conclusions which can be drawn from the data included in the table. *[2 marks]*
- Identify **two** reasons why the majority of the web news audience is people in their 30s. *[2 marks]*
- Explain **two** reasons why online newspapers are not yet profitable even though some charge subscription fees. *[4 marks]*

(This question continues on the following page)

(Question 1 continued)

- (d) Describe **two** advantages of online newspapers over printed media **or** television. *[4 marks]*
- (e) Discuss **two** ethical practices which newspaper companies should consider when providing online news. A weighing-up of arguments is required in the response. *[8 marks]*

SECTION B

Answer **two** questions. Candidates should note they are unlikely to achieve high marks for part (c) or part (d) of each question if the answer is not developed and presented in a planned and structured way.

2. Some businesses monitor the performance of their employees in the workplace. The data which is collected from this process is often stored in the employees' personal records.
- (a) Outline **two** pieces of information which could be collected by monitoring the activities of employees **and** how each piece of information could be collected. [4 marks]
 - (b) Describe **one** advantage of employee monitoring for the employee and **one** advantage for the employer. [4 marks]
 - (c) Discuss **three** actions that an employer could take in implementing an employee monitoring system without causing the employees to feel that their privacy is invaded. A weighing-up of arguments is required in the response. [12 marks]
3. A school provides staff and students with access to its computer network as a way to increase their productivity. The network is used for storing academic and administrative information and it also provides the school community with e-mail and full access to the Internet.
- (a) Describe **two** factors that could reduce productivity instead of increasing it when the computer network is introduced in the school. [4 marks]
 - (b) The headteacher is concerned that unauthorized software may be installed on the network. Explain **two** reasons why software may be regarded as unauthorized. [4 marks]
 - (c) The school is considering producing a code of conduct for the use of networked computers and the Internet. Discuss **one** appropriate rule which must be included in such a code to prevent computer misuse, and **two** ethical factors that must be taken into account when the code of conduct is produced. [12 marks]

4. Scientists are developing a cheap, battery-operated hand-held computer which allows access to the world wide web. It reads information aloud to the user.
- (a) Describe **one** problem caused by a human disability (educational or physical) that this computer may help to overcome. *[2 marks]*
 - (b) Describe how this computer may help to overcome the problem you have described in part (a). *[2 marks]*
 - (c) Discuss **two** policies which should be implemented to ensure widespread distribution of these machines to those who will benefit from them. *[4 marks]*
 - (d) Discuss **three** social impacts that could arise from the availability of inexpensive online access to the web across the global society. *[12 marks]*
5. The film industry depends on the use of IT in various phases of producing films.
- (a) State **two** uses of IT in creating films. *[2 marks]*
 - (b) Describe **three** social impacts of using IT in film creation. *[6 marks]*
 - (c) Discuss **three** ethical considerations which emerge from using these new technologies in film making. *[12 marks]*
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