



2008

**HIGHER SCHOOL CERTIFICATE
EXAMINATION**

Information Technology

General Instructions

- Reading time – 5 minutes
- Working time – 2 hours
- Write using black or blue pen
- Board-approved calculators may be used
- Write your Centre Number and Student Number at the top of pages 9, 11 and 13

Total marks – 80

Section I Pages 2–6

15 marks

- Attempt Questions 1–15
- Allow about 15 minutes for this section

Section II Pages 9–13

35 marks

- Attempt Questions 16–19
- Allow about 45 minutes for this section

Section III Pages 15–17

30 marks

- Attempt TWO questions from Questions 20–22
- Allow about 1 hour for this section

Section I

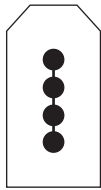
15 marks

Attempt Questions 1–15

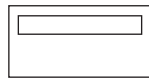
Allow about 15 minutes for this section

Use the multiple-choice answer sheet for Questions 1–15.

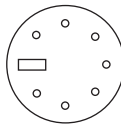
- 1 Which port below would allow you to connect a USB scanner?



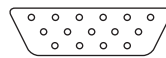
(A)



(B)



(C)



(D)

- 2 The head of the marketing department at your company requires you to design a spreadsheet template to use as an invoice.

What type of client/customer is the marketing department?

- (A) Contract
 - (B) External
 - (C) Internal
 - (D) Outsourced
- 3 The data from a spreadsheet needs to be imported into a database package.

Which file format would be the most appropriate when saving the spreadsheet file?

- (A) CSV
- (B) HTML
- (C) PDF
- (D) RTF

- 4** A document contains several headings. The first of the headings has been modified with a larger font, italics and a 1cm left indent.

Which of the following would allow you to duplicate these modifications to the other headings?

- (A) Using the format painter
- (B) Cutting and pasting the first heading
- (C) Copying and pasting the first heading
- (D) Using paragraph formatting from the menu

- 5** The receptionist of a company is having difficulty logging on to her networked workstation.

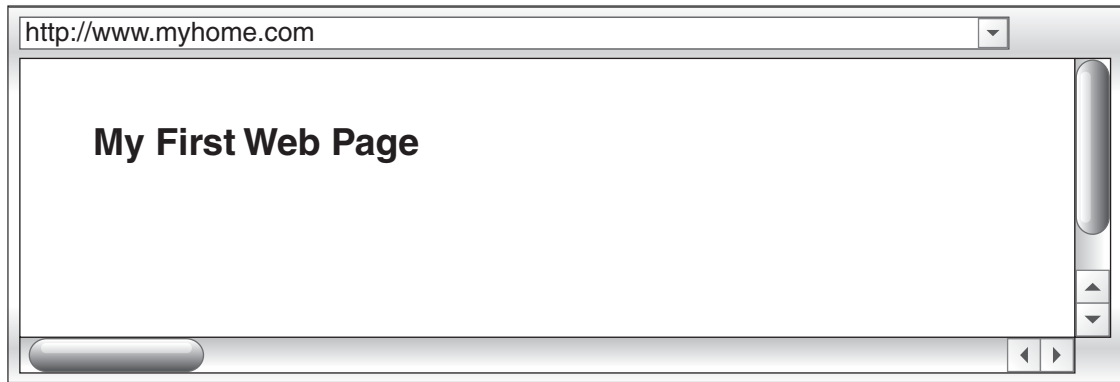
Which of the following personnel would be most suitable to deal with her problem?

- (A) Web designer
- (B) Help-desk operator
- (C) Software developer
- (D) Hardware technician

- 6** Which of the following uses ONLY verbal communication?

- (A) Body language, memo, email
- (B) Memo, paging system, team meeting
- (C) Team meeting, answering machine, telephone
- (D) Body language, telephone, answering machine

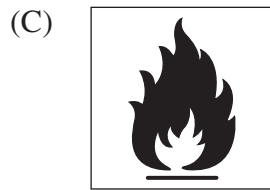
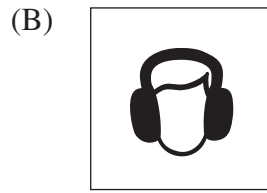
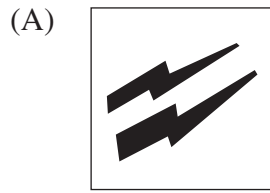
7



What HTML code was used to generate the title above?

- (A) `<b My First Web Page b>`
 - (B) ` My First Web Page `
 - (C) ` My First Web Page `
 - (D) ` My First Web Page `
- 8 A large company has recently implemented an upgrade to the operating system on all its networked computers. It develops a survey to get feedback from the users of the new system.
- Which of these is an example of a closed question that might be included in the survey?
- (A) 'What are your thoughts on the new system?'
 - (B) 'How does this system meet your requirements?'
 - (C) 'Describe your experience when using the new system.'
 - (D) 'Have you experienced any difficulties using the new system?'
- 9 Which of the following is an example of an open-source operating system?
- (A) Unix
 - (B) Linux
 - (C) Open Office
 - (D) Windows Vista

10 What sign might you find located on the door of a storage room containing cleaning products?



11 What is the primary role of a UPS?

- (A) It provides power supply during a blackout.
- (B) It provides protection against illegal access to data.
- (C) It provides a system that can never be switched off.
- (D) It provides portable power supply for notebook computers.

12 You have been instructed to install additional RAM into a company computer.

Which is the correct order of steps that you should follow to install the RAM safely?

- (A) Install RAM, isolate computer from power supply, connect anti-static strap to wrist
- (B) Connect anti-static strap to wrist, install RAM, isolate computer from power supply
- (C) Isolate computer from power supply, install RAM, connect anti-static strap to wrist
- (D) Isolate computer from power supply, connect anti-static strap to wrist, install RAM

- 13** This diagram displays the results of running a scandisk utility on the hard disk drive of a workstation.

What does 'B' represent?

									B
B	B	B				B	B	B	
			B	B	B				B

- (A) Faulty sections on the disk
- (B) Fragmented files on the disk
- (C) Binary data stored on the disk
- (D) The location of blocks on the disk
- 14** A large organisation has recently established an Occupational Health and Safety committee.

With which of the following does this comply?

- (A) An OHS act
- (B) An OHS standard
- (C) An OHS procedure
- (D) An OHS code of practice
- 15** Which of the following statements is true about macros?

- (A) They can be hyperlinked to a file.
- (B) They can be saved as a separate file.
- (C) They can only be used to carry viruses.
- (D) They can be embedded in a spreadsheet.

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Centre Number

Section II

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Student Number

35 marks

Attempt Questions 16–19

Allow about 45 minutes for this section

Answer the questions in the spaces provided.

Marks

Question 16 (7 marks)

A faulty 30 inch monitor is sitting on the floor of an office on the sixth level of a building. You have been asked to move the monitor to your workroom, on the third level, in order to carry out routine maintenance.

- (a) Identify ONE appropriate detail other than serial number and model number that needs to be recorded on a maintenance report/card. 1

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- (b) Identify ONE cleaning product to remove smudges from the monitor's viewable screen. Justify your answer. 2

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- (c) Analyse TWO occupational health and safety (OHS) issues you must consider in the process of relocating this monitor to your workroom. 4

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Question 17 (9 marks)

The advertising department has recently purchased an image-editing software package for one of its workstation computers. This computer is accessible to all employees.

- (a) Identify THREE hardware specification requirements other than RAM which may need to be taken into account before installing the package.
- | | |
|-------------|---|
| (i) | 1 |
| (ii) | 1 |
| (iii) | 1 |
- (b) The software package states a minimum hardware requirement of 1GB of RAM. The workstation has 2GB of RAM installed.

Explain the benefits of the additional RAM when using this program.

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- (c) The manager of the department wishes to limit access to this software package to the two graphic designers working on a web project.

Outline the procedure to be followed to prevent unauthorised access to this package.

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- (d) As part of the installation, folders are required to store the saved project files.

In the space provided draw a diagram or detail a directory path that shows a suitable folder hierarchy for these files.

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Centre Number

Section II (continued)

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Student Number

Marks

Question 18 (11 marks)

A diagnostic tool was run on two workstations. The results for each workstation are shown.

Workstation 1

DISK CAPACITY:	80GB
USED SPACE:	80%
FREE SPACE:	20%
FRAGMENTATION:	1%

Workstation 2

DISK CAPACITY:	60GB
USED SPACE:	30%
FREE SPACE:	70%
FRAGMENTATION:	28%

- (a) Identify from the tables which workstation requires defragmentation. 1

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- (b) Outline the processes carried out to defragment a hard disk. 2

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- (c) Describe a benefit of defragmenting a hard disk. 2

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Question 18 continues on page 12

Question 18 (continued)

- (d) After running a virus scan on Workstation 1 you discover that it is infected with a worm virus.

- (i) Outline a procedure to follow when a virus is detected.

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- (ii) Contrast the worm virus with a macro virus.

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End of Question 18

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Centre Number

Section II (continued)

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Student Number

Marks

Question 19 (8 marks)

Inappropriate usage of computers by staff, including installation of illegal software, was identified in a company audit trail.

- (a) (i) Identify ONE other type of information that can be obtained from an audit trail. 1

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- (ii) What law does the installation of illegal software breach? 1

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- (b) Identify and justify a method of communication the manager could use to notify the staff of concerns about the inappropriate use of the company computers. 2

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- (c) Analyse TWO implications for the company if it fails to act on finding illegal software on its workstations. 4

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Information Technology

Section III

30 marks

Attempt TWO questions from Questions 20–22

Allow about 1 hour for this section

Answer each question in a SEPARATE writing booklet. Extra writing booklets are available.

In your answers you will be assessed on how well you:

- demonstrate relevant knowledge and understanding
 - communicate ideas and information, using precise industry terminology and appropriate workplace examples
 - organise information in a well-reasoned and cohesive response
 - solve proposed issues or problems
-

Question 20 (15 marks)

A recent survey has identified that new IT support staff have limited understanding about running standard diagnostic tests.

A training program is being developed to address this issue.

The following areas have been considered for inclusion:

- basic diagnostic procedures
- major areas in which computer problems arise
- sources of technical data and information for fault finding
- the problem-solving process involved.

Prepare a detailed reference guide outlining relevant information on each of the areas to be included in the training program.

In your answers you will be assessed on how well you:

- demonstrate relevant knowledge and understanding
 - communicate ideas and information, using precise industry terminology and appropriate workplace examples
 - organise information in a well-reasoned and cohesive response
 - solve proposed issues or problems
-

Question 21 (15 marks)

A rural town council wishes to convert an existing room in the town library into a computer room for use by community members.

The council hopes to provide the local community with access to:

- the internet
- black and white laser and inkjet colour printing
- scanning
- training on various office applications.

The room is big enough to accommodate 15 desktop computers with additional space in the room for a trainer's workstation.

Provide a written recommendation to the manager of the town council identifying and justifying possible cost-effective solutions, including new hardware, new software, training and implementation to meet the requirements of council.

Question 22 (15 marks)


As a help-desk operator for a local school district you have received an email from a school administrator requesting assistance in the production of word-processed identification tags for the school's 600 students. The school is about to purchase image-editing software. The school currently owns an office package that includes a database which only accepts bmp file format images.

The following three attachments were included with the email.



Attachment 1
image1.png
(actual size)

Local School



Name:

D.O.B:

Year:

Student Number:

Attachment 2
demotag.jpg
(actual size)

File Edit View Insert Format Tools Table Window Help						
	A	B	C	D	E	F
1	Name	Allergies	Home Room	D.O.B	Student No.	Year
2	Jane Smith	Bees	B101	11/7/95	12345	7
3	Bill Brown	NIL	B102	10/5/95	12346	7
4	Sue James	NIL	B101	1/2/95	12347	7
5	Son Nguyen	Peanuts	B107	3/9/95	12348	7
6	Ali Naron	NIL	BG02	4/5/94	12349	8

Attachment 3

Spreadsheet file containing student information (not all records shown)

Write a detailed analysis of the problems in the creation of these identification tags with reference to the following:

- purchase of appropriate image-editing software
- efficient production of the 600 tags
- compatibility of file formats
- inclusion of required data on tags.

Outline a series of procedures to overcome these problems.

End of paper

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