

Information and Digital Technology

Web and software applications

General Instructions

- Reading time – 5 minutes
- Working time – 2 hours
- Write using black pen
- Board-approved calculators may be used
- Write your Centre Number and Student Number at the top of pages 9, 11, 13 and 15

Total marks – 80

Section I Pages 2–8

20 marks

- Attempt Questions 1–20
- Allow about 20 minutes for this section

Section II Pages 9–15

30 marks

- Attempt Questions 21–26
- Allow about 50 minutes for this section

Section III Page 17

15 marks

- Attempt Question 27
- Allow about 25 minutes for this section

Section IV Page 18

15 marks

- Attempt Question 28
- Allow about 25 minutes for this section

Section I

20 marks

Attempt Questions 1–20

Allow about 20 minutes for this section

Use the multiple-choice answer sheet for Questions 1–20.

- 1 Which of the following is permitted under the licence of an open-source operating system software?
- (A) Sell the software
 - (B) Download the software for free
 - (C) Change the name of the software
 - (D) Place a copyright on the software
- 2 The minimum wages and conditions an employee is entitled to in Australia are set out in
- (A) agreements.
 - (B) arrangements.
 - (C) awards.
 - (D) contracts.
- 3 The diagram represents the results of running a diagnostic utility before and after performing a process on a hard drive.

B = Bad block

B				B	B														
						B	B												B
																		B	B

Before the process

B = Bad block

B	B	B	B	B	B	B	B	B											

After the process

Which of the following processes has been performed on the hard drive?

- (A) File sharing
- (B) Optimisation
- (C) System backup
- (D) File compression

- 4 What type of document would be most likely to contain the following statement?
‘An employee must not share the personal information of another employee with co-workers or the public.’
- (A) Code of conduct
 - (B) Employee role statement
 - (C) Work health and safety policy
 - (D) Equal employment opportunity policy
- 5 A company carries out a full backup on Tuesday and Friday nights and a differential backup on Monday, Wednesday, Thursday, Saturday and Sunday nights. On Monday morning, the file server failed and caused all files to be destroyed.
- Which of the following is the best way to recover the files?
- (A) Restore the full backup from Friday
 - (B) Restore Friday’s full backup and Sunday’s differential backup
 - (C) Restore Friday’s full backup and Monday’s differential backup
 - (D) Restore Friday’s full backup and both Saturday’s and Sunday’s differential backups
- 6 One example of a human cost of a workplace injury is loss of
- (A) staff.
 - (B) profit.
 - (C) output.
 - (D) morale.

- 7 The image shows a floor channel cable cover placed over a power cable.



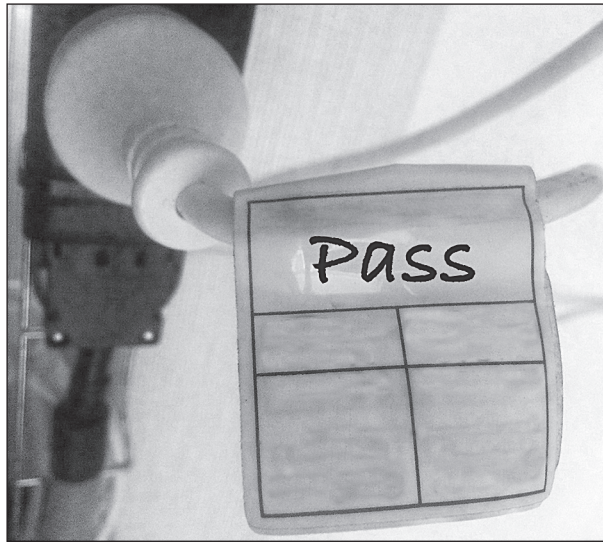
What is the main purpose of the floor channel cable cover?

- (A) To hide the cable
 - (B) To create a footrest
 - (C) To prevent a power surge
 - (D) To reduce the risk of tripping
- 8 Kim receives an email claiming that her credit card account is about to be suspended unless she emails her credit card details and personal identification number (PIN) immediately.

What is this an example of?

- (A) Phishing
- (B) Scanning
- (C) Debugging
- (D) Virus signing

- 9 The image shows a testing tag attached to a power cable.



According to the Australian standard, what other critical information must be included on the tag?

- (A) Date tested, retesting date, technician ID, testing company name
 - (B) Location of test, retesting date, technician ID, testing company name
 - (C) Date tested, technician ID, type of cable, testing company licence number
 - (D) Location of test, retesting date, type of cable, testing company licence number
- 10 Access to a document needs to be restricted to a small group of users.

Which of the following would be modified to achieve this?

- (A) Creations
- (B) Extensions
- (C) Permissions
- (D) File attributes

11 Which part of the following path structure indicates the displayable page on a website?

//Home/About_Us/Work_Family/index.htm

- (A) Home
- (B) About_Us
- (C) index.htm
- (D) Work_Family

12 The manager of a company wants to give all the employees a pay increase.

Which of the following software applications is the most suitable for calculating the financial effect on the company?

- (A) Spreadsheet
- (B) Image editing
- (C) Web authoring
- (D) Word processing

13 A report containing text and photographs needs to be sent to several companies. The companies use different computer platforms. It is important that they can easily open the report file and that the formatting and layout of the report is preserved.

Which of the following file formats is the most suitable for this task?

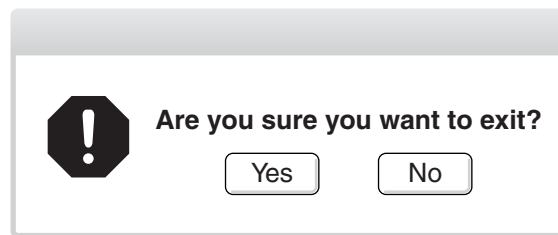
- (A) doc
- (B) pdf
- (C) txt
- (D) rtf

14 Information in a word-processed document is displayed with a number at the beginning of each line.

Which word-processing feature has been used?

- (A) Labelling
- (B) Indentation
- (C) Bibliography
- (D) Formatted list

- 15 The following message appears on a computer screen.



What type of message is this?

- (A) Alert
 - (B) Error
 - (C) Shortcut
 - (D) Virus
- 16 A user, working on a personal computer connected to the internet, wants to use the file transfer protocol (FTP) to upload files to a server.
- Which of the following is required at the user's personal computer?
- (A) FTP Client
 - (B) A web browser
 - (C) FTP server software
 - (D) A cable connection to the server
- 17 Why would a web developer use a markup validation service before going live with a new website?
- (A) To verify the code used is HTML
 - (B) To verify active links in web pages
 - (C) To correct errors in the HTML code
 - (D) To check for errors in the HTML code

- 18** Which of the following documentation of a software package is the most up-to-date to assist with using the functions in the software?
- (A) User manual V1.0.8
 - (B) User manual V2.0.1
 - (C) Software specifications V3.1.2
 - (D) Software specifications V1.0.1
- 19** What is the purpose of a pivot table?
- (A) To count and total data based on a given condition
 - (B) To summarise a large amount of data in tables irrespective of the original layouts
 - (C) To calculate a percentage change to totals based on given conditions
 - (D) To graphically represent tabulated data to make it easier to see patterns and trends
- 20** An application allows the use of ALT+CTRL+Y to insert an image. When the user executes this function, the image does not insert.

What could have caused this problem?

- (A) Styles disabled
- (B) Frames disabled
- (C) Macros disabled
- (D) Tracking disabled

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Centre Number

Section II

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Student Number

30 marks

Attempt Questions 21–26

Allow about 50 minutes for this section

Answer the questions in the spaces provided. These spaces provide guidance for the expected length of response.

Question 21 (6 marks)

- (a) What is meant by *recommended requirements* in reference to an operating system? **1**

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- (b) How do the power management settings of *hibernate* and *suspend* differ? **3**

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- (c) What is the difference between *batch* and *real-time* systems? **2**

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Centre Number

Section II (continued)

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Student Number

Question 22 (5 marks)

- (a) Identify TWO diagnostic functions that are performed by antivirus software. **2**

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- (b) Outline TWO tasks that should be included in a routine maintenance schedule. **3**

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Question 23 (4 marks)

- Explain the benefits of effective teamwork. **4**

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Section II (continued)

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Question 24 (8 marks)

- (a) A user wishes to include part of a copyright-free image from a website in a word-processed document. 2

List the steps to achieve this.

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- (b) Outline ONE aspect of how a code of ethics relates to the use of commercial software packages. 2

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- (c) A school that allows its students to use their own computing devices such as laptops, tablets and mobile phones, has just developed a simple website to inform students about its events. 4

Outline suitable procedures for testing the website.

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Centre Number

Section II (continued)

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Question 25 (3 marks)

This is part of the source code for a webpage.

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<!DOCTYPE HTML>  
<HTML>  
<HEAD>  
  <title>Yr12 formal</title>  
  <link rel="stylesheet" href="yr12stylesheet.css">  
</HEAD>
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Outline the functions of the code between the HEAD tags.

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Question 26 (4 marks)

Using examples, explain how conditional formatting may be applied to improve the visual presentation of a spreadsheet.

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Section III

15 marks

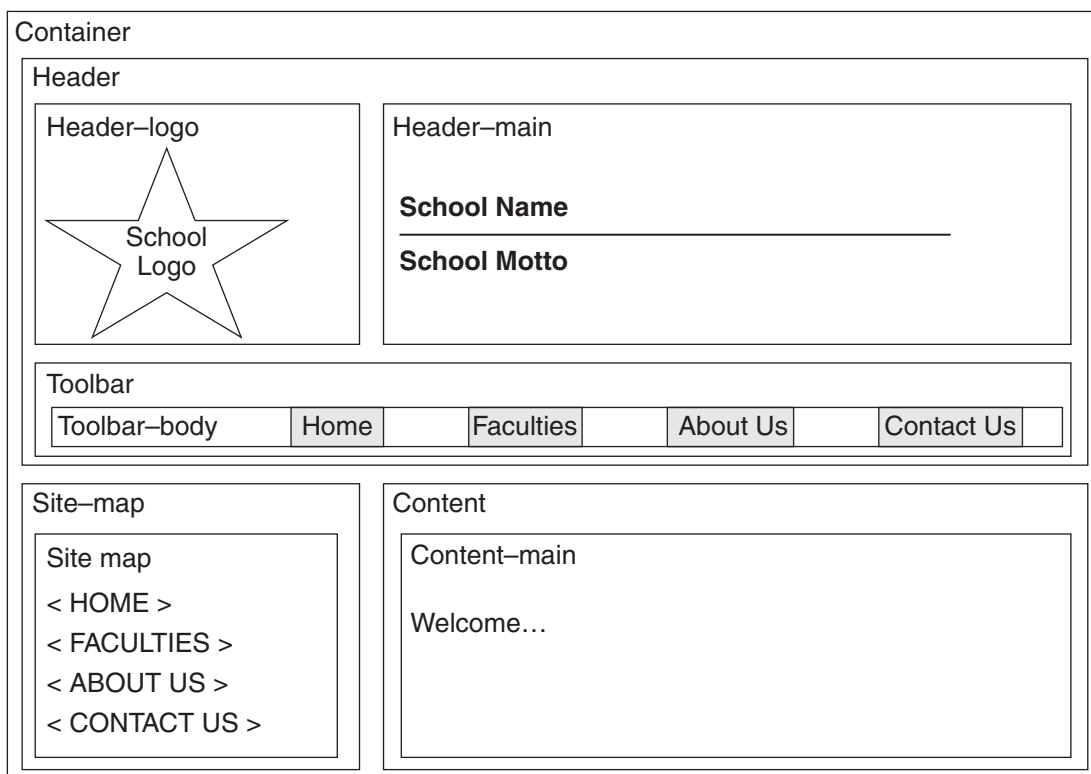
Attempt Question 27

Allow about 25 minutes for this section

Answer the question in a writing booklet. Extra writing booklets are available.

Question 27 (15 marks)

This diagram shows a website template designed for a school.



- (a) Construct a site map for the website template labelling all relevant features, and justify the benefits of using cascading style sheets (CSS) in this website. **7**
- (b) Draw an online form to allow users to submit questions or requests via the CONTACT US page on this website. Justify your choices of form elements used. **8**

Please turn over

Section IV

15 marks

Attempt Question 28

Allow about 25 minutes for this section

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

Your answer will be assessed on how well you:

- demonstrate knowledge and understanding relevant to the question
 - communicate ideas and information using relevant workplace examples and industry terminology
 - present a logical and cohesive response
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Question 28 (15 marks)

A technology company is reviewing its risk management after several workplace injuries. A technician was struck by a box falling from a shelf while repairing a printer. A client slipped and fell on a wet floor when the floor was being cleaned. Most recently, a trainee suffered an electric shock while attempting to repair a computer.

Explain how risk management could be applied in this workplace to identify hazards, and to assess, control, monitor and review risks.

End of paper