



NSW Education Standards Authority

2020 HIGHER SCHOOL CERTIFICATE EXAMINATION

Information and Digital Technology

Web and software applications

General Instructions

- Reading time – 5 minutes
- Working time – 2 hours
- Write using black pen
- Calculators approved by NESA may be used
- Write your Centre Number and Student Number at the top of pages 13 and 17

Total marks: 80

Section I – 20 marks (pages 2–9)

- Attempt Questions 1–20
- Allow about 25 minutes for this section

Section II – 30 marks (pages 13–19)

- Attempt Questions 21–26
- Allow about 45 minutes for this section

Section III – 15 marks (page 21)

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

Section IV – 15 marks (page 22)

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

Section I

20 marks

Attempt Questions 1–20

Allow about 25 minutes for this section

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

1 The operating system of a computer needs to be reinstalled.

What is the first step in preparing the hard drive?

- A. Backup the hard drive
- B. Format the hard drive
- C. Partition the hard drive
- D. Uninstall the existing operating system

2 A small business replaced all its desktop computers with laptop computers due to potential health concerns about radiation exposure.

Which form of risk control has been applied?

- A. Administrative
- B. Engineering
- C. Isolation
- D. Substitution

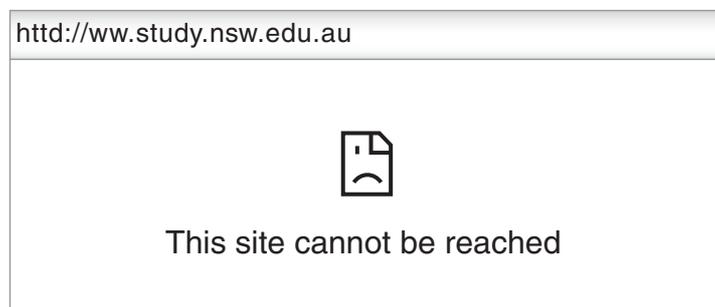
3 A virus that appears to function as a legitimate software application is called a

- A. macro.
- B. signature.
- C. trojan.
- D. worm.

- 4 A business needs to collect feedback from a large number of clients in relation to the installation of a new system.

Which method would allow the feedback to be most efficiently collected and analysed?

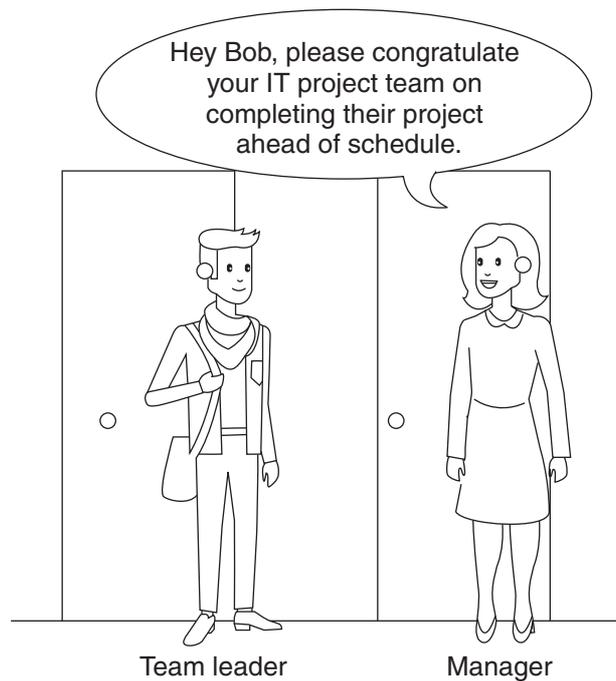
- A. Online survey
 - B. Personal interview
 - C. Small group meeting
 - D. Hardcopy questionnaire
- 5 A student is looking up a syllabus document on the internet and receives the following message.



What is the root cause of this problem?

- A. User error
 - B. Hardware issue
 - C. Electrical outage
 - D. Connectivity issue
- 6 Which of the following has the primary role of safeguarding employee entitlements in the IT workplace?
- A. PCBU
 - B. Union
 - C. Workplace assessor
 - D. Professional association

- 7 The following diagram shows a conversation between a manager and a team leader in a corridor.



What type of feedback is the manager providing to the IT project team?

- A. Direct formal
 - B. Direct informal
 - C. Indirect formal
 - D. Indirect informal
- 8 A worker frequently sends emails to one particular colleague using bold, uppercase text. The receiver believes this is bullying.

If true, what type of bullying would this be?

- A. Physical
- B. Psychological
- C. Sexual
- D. Verbal

9 A primary responsibility of SafeWork NSW is to

- A. train staff.
- B. provide rehabilitation.
- C. pay workers compensation.
- D. conduct workplace inspections.

10 A technician is working on a machine with an open-source operating system.

Which command line utility is the technician most likely to use to assign a static IP address to a WLAN interface?

- A. chkdsk
- B. ifconfig
- C. ipconfig
- D. ping

11 Which commercial software application is best for producing business letters and reports?

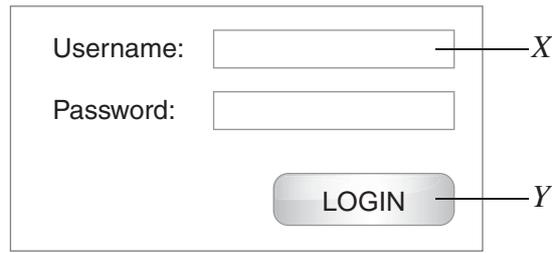
- A. Browser
- B. Spreadsheet
- C. Web authoring
- D. Word processing

12 A worker needs to check the licensing agreement of a new software application.

Which type of documentation would be most useful?

- A. Online help
- B. User manual
- C. Training material
- D. Vendor documentation

13 A screenshot is shown.



Which row of the table correctly identifies the interactive components *X* and *Y*?

	<i>X</i>	<i>Y</i>
A.	Form	Button
B.	Form	Drop-down list
C.	Field	Button
D.	Field	Drop-down list

14 Which of the following does the symbol ¶ in a word processing document indicate?

- A. Alignment
- B. Paragraph
- C. Pagination
- D. Section break

15 In a workplace, the network drive 'T:' is visible for some users but not others.

What is the most likely reason for this?

- A. The hardware is faulty.
- B. The driver needs to be updated.
- C. The drive has been moved to a new location.
- D. Permission has not been granted to some users.

16 Consider the following snippet of HTML code.

```
<h1>Education</h1>
<h2>Subjects</h2>
<ul>
  <li>English</li>
  <li>Maths</li>
  <li>Science</li>
</ul>
```

Which of the following would be produced by this code?

- A.

Education

Subjects

 1. English
 2. Maths
 3. Science

- B.

Education

Subjects

 1. English
 2. Maths
 3. Science

- C.

Education

Subjects

 - English
 - Maths
 - Science

- D.

Education

Subjects

 - English
 - Maths
 - Science

- 17 An apostrophe has been placed in front of a number in a spreadsheet cell.

	A	B	C
1			
2		'321	
3			

What is the reason for doing this?

- A. To convert the number to text format
 - B. To format the number with number placings
 - C. To stop the number converting to a date format
 - D. To format the number as an exponential number
- 18 In a document, the first 10 pages need to be numbered as pages i, ii, iii and so on. The next 10 pages need to be numbered as pages 1, 2, 3 and so on.

Which combination of word-processing features would be most effective in achieving this?

- A. Section, footer
 - B. Header, footer
 - C. Section, page number format
 - D. Header, page number format
- 19 The formula in cell B5 is “= B4 + \$A\$2”. The formula is copied to cell B10.

What formula will now be in cell B10?

- A. = B9 + \$A\$2
- B. = B9 + \$A\$7
- C. = B10 + \$A\$2
- D. = B10 + \$A\$7

20 Consider the spreadsheet shown.

	A	B	C
1	Financial Statement 2020		
2			
3	Date	Income (\$)	Expenses (\$)
4	1-Feb	2542.00	
5	23-Mar		5663.00
6	6-Jun	1898.00	
7	30-Jun		1448.00
8	22-Sep	756.00	
9	11-Nov		3127.00
10			
11	Totals	5196.00	10238.00
12			
13	Balance	-5042.00	debit

Cell C13 contains a formula which automatically identifies whether the balance amount is a debit or a credit.

What would this formula be?

- A. =IF(B13<0,"debit")
- B. =IF(B13>0,"credit")
- C. =IF(B13>=0,"credit","debit")
- D. =IF(B13>=0,"debit","credit")

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Section II

30 marks

Attempt Questions 21–26

Allow about 45 minutes for this section

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

Question 21 (3 marks)

Outline TWO factors that could influence the choice of an operating system.

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Please turn over

Question 22 (5 marks)

An employee has discovered that a virus has infected their work computer.

(a) Who should the employee notify regarding this virus? Justify your answer. **2**

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(b) Justify what information should be recorded following the discovery of the virus. **3**

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Question 23 (7 marks)

(a) Distinguish between *consultation* and *participation* in relation to work health and safety in the workplace. **3**

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(b) Explain the importance of keeping safety data sheets (SDS) and chemical registers up to date in an IT workplace. **4**

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Section II (continued)

Question 24 (4 marks)

- (a) Identify TWO reasons why documents would be archived. **2**

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- (b) Outline reasons for testing a newly built website. **2**

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Please turn over

Question 25 (3 marks)

Outline the steps in creating a mail-merge document.

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Question 26 (8 marks)

(a) Outline how to create a table of contents that can be automatically updated using word processing software. **2**

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(b) How does the use of ‘track changes’ in a word-processed document allow for collaboration? **2**

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(c) Using examples, explain how document automation may be implemented to improve workplace efficiency. **4**

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Information and Digital Technology

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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)

A client has approached a web designer to help redevelop a website that they have initially created using word processing software. The client also wants to take an active role in the development process.

- (a) Describe the advantages of using web authoring software rather than word processing software to develop the new website. **3**
- (b) Discuss issues that could arise from the involvement of the client in the development process of the new website. **4**
- (c) Explain how a site map and cascading style sheets (CSS) can assist with the development of the new website. **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
-

Question 28 (15 marks)

An IT company has recently been receiving negative feedback from its customers. Complaints have been mainly about support staff not being aware of software features and updates, and telling customers to ‘look it up yourself’ instead of trying to assist them with problems.

Justify strategies that this IT company could implement to both improve work practices and assist its staff to maintain industry currency.

End of paper