

2021 VCE VET Information, Digital Media and Technology external assessment report

General comments

Questions on the examination paper often require students to be familiar with key terms and to define and explain them. Students are reminded to read the questions carefully, as occasionally they might miss key words or terms which may result in answers that do not respond to the question asked. One useful technique is to underline the key words in the question.

In addition, students are required to identify and explain why features are beneficial, suggest strategies and know the order of steps and processes. Students must ensure that they do not just re-write or reword the question, which wastes valuable examination time.

Specific information

Note: This report provides sample answers or an indication of what answers may have included. Unless otherwise stated, these are not intended to be exemplary or complete responses.

The statistics in this report may be subject to rounding resulting in a total more or less than 100 per cent.

Section A – Multiple-choice questions

The table below indicates the percentage of students who chose each option.

Question	Correct answer	% A	% B	% C	% D
1	D	10	5	9	76
2	C	27	8	46	19
3	C	16	15	56	12
4	A	51	30	9	10
5	C	10	1	61	28
6	D	2	12	10	76
7	B	8	29	62	0
8	D	22	19	36	23
9	A	45	1	45	8
10	B	0	70	4	26
11	A	54	14	16	17
12	A	59	24	0	16
13	B	19	42	0	38
14	D	1	0	13	86
15	D	14	5	1	80
16	C	18	15	51	16
17	B	10	77	10	3
18	B	11	53	28	8
19	A	87	8	2	3
20	C	5	22	60	13

Section B – Short-answer questions

Question 1

Mark	0	1	2	Average
%	10	22	68	1.6

Possible responses included any two of the following:

- name of school
- reason for closing the job
- who completed the job
- feedback from school
- solution notes
- final escalation level
- date/time closed
- description of problem
- contact details
- who reported the issue.

Question 2

Mark	0	1	2	Average
%	44	24	32	0.9

Sample response:

- A static IP address is an address that is manually set for a specific device and does not change.
- It is used when an IP address needs to be easily found or shared on a network. / It is used to avoid IP address conflict.

Question 3

Marks	0	1	2	3	Average
%	20	36	33	11	1.4

Possible responses included any three of the following:

- Is it affecting all clients?
- Are there any common characteristics of the clients affected (certain location etc.)?
- Has Jasper tried to restart computer/website?
- Has Jasper checked the website logs?
- Has Jasper got a connection to the website?
- Has it happened before?
- Has Jasper altered the software/hardware?
- Does this happen at a particular time?
- Do bank records indicate a transaction has occurred or has the client received any other form of order confirmation?

Question 4a.

Marks	0	1	Average
%	18	82	0.8

Correct responses identified a valid device, such as a modem, router or switches.

Question 4b.

Mark	0	1	2	Average
%	52	22	26	0.8

Responses needed to:

- identify firmware as onboard or inbuilt software in a device
- describe firmware as software that controls the settings and features of the device.

Question 4c.

Mark	0	1	2	Average
%	22	37	41	1.2

Possible responses included:

- during regular maintenance / if the device is not working or not working properly / if security vulnerability is found / when update advice is provided / if the operating system has been changed
- download software update from the maker (automatically or manually).

Question 5

Marks	0	1	2	3	Average
%	44	16	35	5	1.0

Possible responses included:

- Closed source: most software that is purchased; the source code can't be altered, copied or sold (e.g. commercial games, Microsoft Word and similar apps).
- Open source: free software; users can alter the source code or give away.
- Freeware: free software; users cannot alter the source code or give away without authorisation.

Question 6a.

Mark	0	1	2	Average
%	33	31	36	1.0

Responses should have included a suitable explanation of a driver, for example: a software app that 'talks' between hardware devices and the operating system.

Responses also needed to identify that a driver is needed for each hardware device, as they have their own unique set of required instructions/commands.

Question 6b.

Marks	0	1	Average
%	38	62	0.6

One of the following:

- from the manufacturer's website
- preloaded in the operating system
- on an installation device, such as a DVD.

Question 7

Marks	0	1	2	3	4	Average
%	2	5	21	39	33	3.0

Any two of the following advantages:

- encourages the use of a unique password for each different site
- can be used to generate strong passwords
- user only needs to remember one master password – the password manager remembers the rest
- makes the login process easy (automatic logins)
- makes changing passwords easier
- can store other data as well
- can be used across multiple devices
- can check for compromised password lists on the dark web
- can provide a way to 'securely' store and share a password (e.g. with a family member).

Any two of the following disadvantages:

- a single point of failure
- if the device is hacked, all passwords will be revealed
- may not support all devices
- may not work well with all websites.

Question 8a.

Mark	0	1	2	Average
%	1	28	71	1.7

Possible responses included any two of the following:

- to gain a better understanding of what the client is expecting
- to ensure the client has understood what you have provided advice on
- to obtain reviews for potential clients
- to identify areas for improvement
- to improve the relationship between client and consultant.

Question 8b.

Marks	0	1	Average
%	6	94	1.0

Possible responses included either of:

- a feedback form – either online or paper
- a verbal, written or face-to-face survey.

Question 9a.

Marks	0	1	Average
%	63	37	0.4

Possible responses included one of the following:

- bulk email
- mass SMS
- site forum notice.

Question 9b.

Mark	0	1	2	Average
%	9	24	66	1.6

Any two of the following:

- an apology / thank you for the email
- what the issue was
- issue is resolved
- a request for confirmation that the issue is resolved for the client
- let the clients know that they can provide further feedback if needed.

Question 9c.

Marks	0	1	2	3	Average
%	4	16	38	42	2.2

Any three of the following:

- time and date
- the problem
- log of messages
- action taken
- resolution
- who logged the problem.

Question 10

Marks	0	1	2	3	4	Average
%	9	2	28	2	60	3.0

Physical security control (any one of the following):

- locks on doors including swipe card or pin pad
- bars on windows
- biometrics
- an alarm system
- security cameras
- wi-fi paint.

Responses also needed to describe exactly how the control type will physically stop anyone from gaining access to the data stored on Liz's computer.

Software security control (any one of the following):

- username and password
- access hierarchy
- firewall
- security protocols such as Wi-Fi Protected Access 2 (WPA2) or two-factor authentication (2FA)
- antivirus software
- encryption of files or data.

Responses also needed to describe exactly how the software security control will stop unwanted intruders from gaining access to the data electronically.

Question 11a.

Marks	0	1	Average
%	58	42	0.4

Any one of:

- large clickable icons
- spoken input / text-to-speech
- eye-movement tracking / custom input devices (controllers).

Question 11b.

Mark	0	1	2	Average
%	32	42	26	1.0

An operating system keeps track of memory, allocates memory as needed and assigns some tasks to virtual memory.

Question 12a.

Mark	0	1	2	Average
%	6	29	64	1.6

Any two of the following:

- age
- access to internet
- languages used.

Question 12b.

Marks	0	1	Average
%	41	59	0.6

A method for testing suitability would be to send the video to a target or diverse group, get them to follow the instructions and then provide feedback.

Question 13a.

Mark	0	1	2	Average
%	28	32	40	1.1

Any two of the following:

- a CAT 6 cable has fewer twists in the pairs
- a CAT 7 has less cross talk noise / is better shielded
- a CAT 7 has an individual protective coating over each pair (and therefore greater noise reduction)
- a CAT 7 is faster (a CAT 6 is up to 10 Gbps over 50 m and 1 Gbps over 100 m, whereas a CAT 7 is up to 40 Gbps over 50 m and 10 Gbps over 100 m)
- a CAT 6 is cheaper.

Question 13b.

Mark	0	1	2	Average
%	20	10	70	1.5

Responses needed to identify an appropriate choice of cabling and provide a justification, for example:

- a CAT 6 would be appropriate for the small accounting firm, assuming it would only require standard office files (not media files)
- a CAT 7 would be appropriate for the video editing business, because they need high speed and would be concerned about data loss.

The physical placement should be described, for example on the ceiling, power over ethernet (PoE), proximity to power and data points.

Question 14a.

Marks	0	1	Average
%	19	81	0.8

Correct responses identified that the client has the final say in any upgrade or significant spend. They may not agree with all or some of the suggested proposal and changes may need to be made.

Question 14b.

Marks	0	1	2	3	4	Average
%	19	27	28	19	7	1.7

Any four of the following:

- investigate and document the amount of technical support that the client may require
- plan the rollout
- discuss and agree on the level of technical support identified with the client
- plan an appropriate time for implementation
- provide technical support as part of group or one-to-one instruction to the client
- notify the client when implementation will occur
- provide manuals and help documentation to the client
- purchase equipment
- workplace health and safety (WHS) audit
- back-up data from old equipment.

Responses that included removing old computers and/or unpacking were not awarded marks.

Question 15a.

Marks	0	1	2	3	Average
%	15	28	38	19	1.6

Responses needed to include the correct name and address for each line.

Component number	Name	Address
1	server, network-attached storage (NAS), dynamic host configuration protocol (DHCP) server or domain name system (DNS) server	192.168.0.251 (if response interpreted the image as a desktop computer, the IP address must be 192.168.0.n where n does not cause an IP address conflict)
2	firewall or gateway	192.168.0.254
3	local computer, laptop or computer	192.168.0.n where n does not cause an IP address conflict

Note: If the subnet mask information was used, marks could not be awarded for that item.

Question 15b.

Marks	0	1	Average
%	68	32	0.3

Any one of the following:

- Ipconfig
- Ifconfig
- 'ipconfig /all'
- 'ifconfig -a'.

Question 16

Marks	0	1	2	3	4	5	6	Average
%	19	2	19	2	37	2	19	3.2

Possible responses included any three of the following:

- Computer and printers: a quick start guide will allow the users to learn how to use the computer and/or printer quickly and efficiently.
- Server: technical manual/specifications explain to the users exactly how the server has been set up with more detail than other documentation.
- Wi-fi: quick start guide / user guide / user manual or online instructions are quick and efficient.
- EFTPOS: user manual (physical or electronic), technical documentation and quick start guide will allow the user to know what they need to do to set it up and use it.
- National Broadband Network (nbn™): technical manual / specifications or user guide / manual, as detailed information is needed.
- Cabling and network cabinet: technical drawings.

For this question, tutorials/videos were classified as training rather than documentation.

Question 17

Marks	0	1	2	3	4	Average
%	17	11	20	21	31	2.4

Some WHS standards are:

- eye level in relation to monitor
- distance from monitor
- back upright at 90 degrees
- lumbar support
- knees at 90 degrees
- elbows at 90 degrees
- acceptable lighting and glare considerations
- feet on the floor (or footrest)
- wrist support
- document holder at appropriate eye level
- waterfall edge to chair
- covered cables/management
- keyboard position.

Note: if the label is a phrase or sentence, the complete phrase or sentence has to be accurate.

Question 18

Marks	0	1	2	3	4	5	6	Average
%	15	6	9	21	14	20	15	3.3

Appropriately labelled cabling/ wireless connections were considered an essential component.

Other possible components included:

- at least one Bluetooth® 'station', stationed appropriately with regard to Bluetooth® range of about 100m
- an internet setup to send off / store QR codes (server/modem)
- switch /router
- computer
- server
- firewall
- cash/card collection point(s)
- Bluetooth® buzzers
- QR code.

Note: components that were not labelled could not be awarded marks.