

2020 VCE VET Information, Digital Media and Technology written examination report

General comments

Generally, students responded well to the questions on the 2020 paper.

It was noted that some students had the ability to respond better to the technical terms used in the questions.

Students are reminded to read the question carefully as occasionally students would miss key words or terms in a question and this resulted in answers that did not properly respond to the question that was asked.

Specific information

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

Question	%A	%B	%C	%D
1	4	13	4	79
2	38	25	7	29
3	14	81	2	3
4	56	12	16	15
5	52	24	19	5
6	3	69	4	24
7	1	4	51	44
8	6	2	19	73
9	6	5	6	82
10	2	5	2	91
11	4	10	76	10
12	27	5	53	15

Question	%A	%B	%C	%D
13	25	41	25	8
14	62	5	14	20
15	39	47	13	1
16	21	27	51	0
17	6	54	33	7
18	1	93	4	2
19	85	1	3	11
20	17	6	18	60

Section B – Short-answer questions

Question 1

Marks	0	1	2	Average
%	50	7	43	0.92

Students were awarded one mark for identifying a feature and 1 mark for a suitable explanation, for example:

- clear and easy to navigate; user can easily understand how to use the manual and therefore the item the manual has been created for
- caters for a diverse audience: as you do not know who is going to use the manual you need to cater for all
- meets the business requirements: must do what is intended to do as if it does not it has not met the requirement of the business
- menu/contents
- index
- images
- glossary
- FAQs.

Full marks were not awarded for just a description of a user guide.

Question 2

Marks	0	1	2	Average
%	61	33	5	0.44

The correct answers (for one mark each):

- via phone sim either cellular or satellite
- to send data regularly as SMS/text/email to their smartphone.

Question 3

Marks	0	1	2	Average
%	7	34	59	1.51

Students were awarded one mark for an action and one mark for a reason:

- Immediately save/back-up any important work and install the security update. To protect the work and possibly allow a smoother update/improve security/follow policy.
- Ignore the message because the operating system will install it when it is ready. Because the operating system (OS) will automatically do the update.
- Samara should continue her work until her next coffee or meal break and then start the update installation. Because they can do it when it suits them, allowing them to complete another task.
- Confirm the status of the update; in case of scamming etc.

Question 4

Marks	0	1	Average
%	60	40	0.4

The correct answer:

- The ICT Help Desk would escalate or seek outside assistance, as such issues are not easily fixed and there is an existing service-level agreement (SLA) which for photocopiers would cover such an event.

Question 5

Marks	0	1	2	3	Average
%	27	21	23	29	1.53

Students were awarded one mark for each of the following (in any order) up to a maximum of three marks:

- Submit user documentation to target audience for review.
- Gather feedback.
- Analyse feedback.
- Check against style guide.
- Replace old versions to avoid confusion.
- Notify staff of the changes.
- Upload documentation to the website.
- Make changes to the user documentation.
- Submit user documentation to appropriate person for approval.

Question 6

Marks	0	1	Average
%	11	89	0.89

Students were awarded one mark for either of the following points:

- additional security
- reduce the likelihood of account hacking.

Question 7a.

Marks	0	1	Average
%	53	47	0.46

Students were awarded one mark for a suitable example:

- Virtual memory is a memory management capability of an operating system that uses hardware and software to allow a computer to compensate for physical memory shortages by temporarily transferring data from random access memory (RAM) to disk storage.
- Virtual address space is increased using active memory in RAM and inactive memory in hard disk drives (HDDs) to form contiguous addresses that hold both the application and its data.
- Virtual memory was developed at a time when physical memory -- the installed RAM -- was expensive.
- Computers have a finite amount of RAM, so memory can run out, especially when multiple programs run at the same time.
- A system using virtual memory uses a section of the hard drive to emulate RAM.
- With virtual memory, a system can load larger programs or multiple programs running at the same time, allowing each one to operate as if it has infinite memory and without having to purchase more RAM.

Question 7b.

Marks	0	1	2	Average
%	67	21	12	0.45

Students were awarded one mark for each of these answers:

- after she has had time to see/use it in action
- by interview, meeting, questionnaire, survey, measurement before and after.

Question 8

Marks	0	1	2	Average
%	5	27	68	1.63

Students were awarded one mark for each non-jargon explanation up to a maximum of 2 marks:

- complex password defined as involving a minimum of two factors such as length, number of character types, avoiding full words
- device configured (ICT will install security or control software).

Question 9a.

Marks	0	1	Average
%	17	83	0.82

Students were awarded one mark for one of the following:

- can get a numerical average showing satisfaction or dissatisfaction
- more likely to be filled out
- simple and easy to understand.

Question 9b.

Marks	0	1	Average
%	13	87	0.86

Students were awarded one mark for one of the following:

- allows personal response
- not inhibited by set categories
- more detail.

Question 9c.

Marks	0	1	Average
%	28	72	0.71

Students were awarded one mark for one of the following:

- hard to summarise
- takes time
- less likely to answer
- artificial intelligence (AI) would struggle.

Question 10a.

Marks	0	1	Average
%	43	57	0.56

Students were awarded one mark for any one of the following:

- network connection to the selected destination
- network card is working
- network protocol is working.

Question 10b.

Marks	0	1	Average
%	59	41	0.41

Students were awarded one mark for any one of the following answers:

- Ping 192.168.1.1
- Ping google.com
- Ping 'IP address'.

Question 10c.

Marks	0	1	Average
%	67	33	0.33

Students were awarded one mark for any one of the following answers:

- to find the path taken through the network to the destination
- to find where the path to a destination is broken.

The traceroute command test is a sequence of Ping commands to test connection to each node on the path to the destination.

Question 11a.

Marks	0	1	2	Average
%	36	34	29	0.93

Students were awarded one mark for each of the following methods of investigating an issue (up to a maximum of two marks):

- active listening to clients and colleagues
- contacting vendor or maintenance organisations
- on-site examination – direct observations
- questions and answers – survey or questionnaire
- reviewing technical advice about the organisation
- provide/ask client to carry out tests.

Question 11b.

Marks	0	1	2	Average
%	43	30	27	0.84

Students were awarded one mark for each detailed description up to a maximum of two marks, for example, contacting the vendor phone/email. The answer needed to be relevant to the method identified in part a.

Question 11c.

Marks	0	1	2	Average
%	53	20	27	0.73

Students were awarded one mark for each description (up to a maximum of two marks) of how to document an issue:

- interview notes
- video evidence
- survey responses collated and graphed
- record.

Question 12

Marks	0	1	2	3	4	5	6	Average
%	16	3	22	7	28	7	17	3.14

Students were awarded two marks for the identification and description of three suitable actions, for example:

- examine current equipment
- research compatible scanners
- develop budget (including minimal cost)
- seek approval
- plan changeover when minimal disruption to classes (classrooms not in use)
- follow WHS standards
- unpack/assemble new scanners
- connect with cable/wi-fi/bluetooth
- research/download latest drivers
- test
- develop user documentation/walk through/train users on new scanners
- look at printers with scanner to save costs (multifunction device).

Question 13a.

Marks	0	1	Average
%	28	72	0.72

Students were awarded one mark for detailed description, for example, use the old icons and colour scheme or old OS settings to be familiar for users.

Question 13b(i).

Marks	0	1	Average
%	30	70	0.7

Students were awarded one mark for a description, for example:

- privacy of sensitive information
- security of assessment information
- administrative staff and students have different data needs.

Question 13b(ii).

Marks	0	1	2	Average
%	27	53	20	0.92

Students were awarded one mark each example (up to a maximum of two marks) relating to the OS:

- Students have less access than staff.
- Only certain people can access medical information.
- Administration can only access payroll and financial information.

Question 13c.

Marks	0	1	2	Average
%	23	35	42	1.18

Students were awarded one mark for answering that a list would be a method to track distribution, and one mark for answering that the list should include the codes that were distributed.

Question 14a.

Marks	0	1	2	Average
%	45	40	15	0.7

Students were awarded one mark for each factor (up to a maximum of two marks).

- Civil Aviation Safety Authority (CASA) regulation etc.
- communication application to connect with the drones
- cost of integration
- level of technical support at the library to maintain system
- GPS coordinates for each borrower's address
- assess the effect on users and community.

Question 14b.

Marks	0	1	2	Average
%	37	56	7	0.7

Students were awarded one mark for describing each factor (up to a maximum of two marks):

- written/digital communication that she can take away with her
- no jargon or that she understands all terminology.

Question 15a.

Marks	0	1	2	3	4	Average
%	25	21	22	20	12	1.74

Students were awarded one mark for each component specification (up to a maximum of four marks):

- Internet connection: multiplayer requires high bandwidth.
- Cabling: fibre to computers/CAT 6
- Desktop computers: needs high speed processor (e.g. I7), independent graphics card, lots of RAM on both motherboard and graphics card
- Cameras: suitable camera specification (including as security for servers/podcasting/facial recognition etc.).

Question 15b.

Marks	0	1	2	Average
%	30	45	25	0.94

Students were awarded one mark for each rational procedure that would identify each client (up to a maximum of two marks):

- password / user names / fingerprint / face recognition/iris scan/voice to log in or a technique such as the use of a driver's license.

Question 15c.

Marks	0	1	Average
%	27	73	0.73

Students were awarded one mark for a method of monitoring the clients, for example, software to spy on their keystrokes, screen capture, use of a camera, physical supervision.

Question 16a.

Marks	0	1	Average
%	43	57	0.56

Students were awarded one mark for one reason for a change:

- to ensure consistency with other company documentation
- to ensure consistency with industry standards.

Question 16b.

Marks	0	1	2	Average
%	31	33	37	1.06

Students were awarded one mark for the method and one mark for the description

- observe clients work through the documentation (not Captain Ivanov)
- collect feedback.

Question 16c.

Marks	0	1	Average
%	60	40	0.4

Students were awarded one mark for an appropriate action, for example, obtain permission from manager.

Students who responded with 'style guide' type answers were not awarded a mark.

Question 17a.

Marks	0	1	2	3	4	5	6	Average
%	14	3	9	21	24	19	9	3.31

For each problem, one mark for each appropriate answer and explanation, up to a maximum of two marks.

Problem 1

Impact High or Medium: Whole council and those communicating with them at that time affected

Urgency Low or Medium:

- emails generally are not expected to be opened within minutes even if they are expected to arrive within minutes
- emails will 'sit' in buffers and usually get through once the server is back up (assuming no more than a day or two); SMS could be used in the interim

If students used 'urgent' in an appropriate explanation, then 'High' should have been ticked.

Problem 2

Impact Medium or High (Low impact can be accepted with a suitable explanation):

- whole council affected
- if not fixed, there will be fines to pay which impacts the council's budget and public relations.

Urgency Medium or High:

- there are four hours to solve this problem and it will possibly be a job handed off to external support so this potentially lowers the urgency slightly (answer needs to mention time).

Problem 3

Impact High:

- whole company and possibly the state of Victoria could be affected
- this could impact on job security for many staff, that is, the council might not have enough work if the project falls through.

Urgency High:

- only a short time frame to fix it, but 90 minutes is almost long enough to buy a new projector or find a replacement if the old one can't be fixed (students needed to reference time).

Question 17b.

Marks	0	1	Average
%	44	56	0.55

Students were awarded one mark for ordering the problems: 3, 2, 1.

Question 18a.

Marks	0	1	2	3	4	Average
%	29	13	17	13	27	1.98

Students were awarded one mark for each appropriate additional component up to a maximum of four marks:

- cabling/wireless
- internet communication/broadband internet (NBN)
- router / switch / access point
- server / networked attached storage (NAS) / cloud
- desktops cables
- cables: CAT6 or CAT7
- printer: either cabled or wireless
- wi-fi access point: WPA2 security AC speed.

Question 18b.

Marks	0	1	2	3	4	Average
%	23	7	17	22	32	2.33

Students were awarded one mark for each appropriate justification up to a maximum of four marks

- cabling/wireless
- internet communication
- broadband internet (NBN) as it is the fastest and most reliable
- router (and or components, modem, switch, access point); for example, need a router to control incoming and outgoing data
- server/NAS/cloud: to manage files, control network access, usernames, password, wireless and printing
- desktops: two cabled need to be near a wall plug
- cables: CAT6 or CAT7; CAT7 is faster and with less chance of data loss
- printer: either cabled or wireless
- wi-fi access point: WPA2 security AC speed
- firewall.