

# 2015 VCE VET Information and Communications Technology examination report

## General comments

The 2015 VCE VET Information and Communications Technology examination assessed the elements, performance criteria and underpinning knowledge and skills in the following units of competency:

- ICAICT301A Create user documentation
- ICAICT302A Install and optimise operating system software
- BSBSUS301A Implement and monitor environmentally sustainable work practices
- ICASAS305A Provide IT advice to clients
- ICASAS306A Maintain equipment and software.

Overall, students performed well in the examination and attempted most questions. The majority of students handled the questions from each unit of competency very well.

Students need to ensure that they read questions carefully and answer the question as asked. Some students recognised a keyword or a number of keywords and presented a factual answer related to those words. These answers were often out of context and did not address the question.

Questions on the examination required students to be familiar with key terms and be able to define and explain them, identify and explain why features are beneficial, suggest strategies and know the order of steps in processes.

## 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

The table below indicates the percentage of students who chose each option. The correct answer is indicated by shading.

Question	% A	% B	% C	% D	% No Answer	Comments
1	12	2	76	10	0	
2	81	0	6	13	0	
3	1	77	3	19	0	
4	8	57	29	6	0	
5	2	11	0	86	0	
6	87	6	5	1	0	

Question	% A	% B	% C	% D	% No Answer	Comments
7	10	19	12	59	0	
8	17	37	14	32	0	The hard disk drive with the operating system has to be set as the first item in the CMOS boot order sequence (option D). Option A was incorrect as there also needs to be an entry in the logs.
9	49	4	34	13	0	
10	17	6	72	5	1	
11	2	51	40	7	0	
12	68	7	18	6	0	
13	1	3	4	92	1	
14	85	5	5	6	0	
15	17	53	10	19	0	
16	21	15	60	5	0	
17	24	23	15	38	0	Standard practice for a Help Desk operator is to check the logs first.
18	28	12	9	51	0	The tests and their results in the question eliminate options A, C and D. Option D is incorrect as the results of the four tests obviate the need for any upgrades.
19	8	8	73	10	0	
20	25	19	26	30	0	

## Section B – Short-answer questions

### Question 1

Marks	0	1	Average
%	24	76	0.8

ICT support staff should avoid using jargon with clients as jargon is technical language and non-technicians may not understand abbreviated terms. Jargon inhibits accurate communications between the parties.

### Question 2

Marks	0	1	2	Average
%	5	8	87	1.8

Sandra might use formal or informal communication methods when communicating with stakeholders.

Formal communication methods include:

- meetings
- surveys
- interviews
- conference calls
- print media.

Informal communication methods include:

- hallway conversations
- lunch meetings
- team-building exercises
- voicemail messages.

**Question 3a.**

Marks	0	1	2	Average
%	34	27	38	1.1

Advantages of purchasing a site licence for the OS include:

- cheaper per seat
- scalable
- commonly only one set of media needed
- facilitates an OS becoming the company OS.

**Question 3b.**

Marks	0	1	Average
%	33	67	0.7

A single-user licence for an OS would be the best option:

- when only one worker uses the OS
- to test an OS before using it.

**Question 4a.**

Marks	0	1	2	Average
%	6	20	74	1.7

Possible causes for the type of problem include:

- no mobile network coverage at Lake Eyre
- the mobile SIM is locked and/or unusable
- the data for the month has expired or been exceeded
- the wi-fi connection to the clubroom's router has failed (because the router is turned off, or the wi-fi password is wrong or has changed)
- the website is down
- the tablet network setting is incorrect/incompatible
- incorrect URL.

**Question 4b.**

Marks	0	1	Average
%	25	75	0.8

Students needed to choose one cause from part a. and then explain how to remove this cause so that John would gain access to the rules. For example, contact/phone the website team and ask for the server to be rebooted.

**Question 5**

Marks	0	1	2	3	4	Average
%	39	33	20	7	1	1

Term	Definition
<i>app</i>	a program or set of programs that carries out a particular task
<i>corrupt profile</i>	damaged information that holds the user's preferences for the operating system environment
<i>social engineering</i>	social networking influences (manipulations) on human behaviour; for example, baiting scenarios enticing people to participate in activities/respond in a certain way that will alter them psychologically (for example, depression/anxiety)
<i>encryption protocol</i>	method/rules by which information is encrypted. Encryption is to make something unintelligible to normal viewing methods in such a way that the underlying information can be restored at a later time

**Question 6**

Marks	0	1	2	3	Average
%	35	17	41	8	1.2

- Response time: the time taken for the third-party supplier to acknowledge the request for support/help on an issue.
- Resolution time: the time elapsed until the issue has been fixed. The service-level agreement should define if this is to the satisfaction of the third party or to the organisation.
- Sign-off: the process where the client acknowledges that the issue has been resolved by the service provider.

**Question 7a.**

Marks	0	1	Average
%	24	76	0.8

- trackball and/or keyboard placed on 'secured' location on or near the floor (so that they don't move out of place)
- touch screen with mirrored screen
- modify the desk; for example, height, size, structure

**Question 7b.**

Marks	0	1	Average
%	34	66	0.7

- activate appropriate accessibility or ease of access options

- activate or install voice-activated software

**Question 7c.**

Marks	0	1	2	Average
%	20	34	46	1.3

Students needed to give two things that would need to be done before implementing the changes they suggested in part a. and part b. Answers could have included:

- getting approval for the proposals from Pedro and his boss
- providing one-on-one instruction on the differences between the home PC and the work PC
- purchase foot controls
- purchase specialist OS/software, install hardware and software
- assess the impact on the workplace.

**Question 8**

Marks	0	1	2	Average
%	42	25	33	0.9

Students needed to explain why three different memory recommendations are suggested when purchasing a new computer game.

Students needed to explain the categories or types of memory: working memory, storage memory, display memory. They also needed to explain that each of these requires memory that is used in different ways and all are required.

**Question 9**

Marks	0	1	2	3	4	Average
%	19	10	29	14	28	2.2

Students needed to list and explain two factors that needed to be considered when preparing an online feedback system for a local school. Factors included:

- The feedback received is only as good as the questions or information asked of the client.
- What method is best to use for this task?
- What information does it need to gather?
- How will it be distributed?
- What instructions will be needed?
- How will the data be collected and analysed?
- How will the results be published?
- Clientele/audience.
- Must be easy to access.
- Logically constructed.

**Question 10a.**

Marks	0	1	Average
%	24	76	0.8

Jeannie checked the network switch as she wanted to ensure that it was working in order to narrow down the location of the error/problem.

**Question 10b.**

<b>Marks</b>	<b>0</b>	<b>1</b>	<b>Average</b>
<b>%</b>	49	51	

Jeannie would ping the switch from her location, or perhaps physically check the machine or reboot the switch.

**Question 10c.**

<b>Marks</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>Average</b>
<b>%</b>	34	33	33	

Jeannie will ask Bill to test a different network cable and/or try connecting a different computer to the existing network cable.

**Question 11a.**

<b>Marks</b>	<b>0</b>	<b>1</b>	<b>Average</b>
<b>%</b>	17	83	

An advantage of sharing the presentation electronically is that it does not require paper or toner; it is an electronic method so no physical resources are used.

**Question 11b.**

<b>Marks</b>	<b>0</b>	<b>1</b>	<b>Average</b>
<b>%</b>	28	72	

The speaker may be worried that electronic distribution allows for unauthorised altering, plagiarism and loss of control of the presentation. They may also be concerned that not everyone has a USB with them, an email account or access to the cloud.

**Question 11c.**

<b>Marks</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>Average</b>
<b>%</b>	7	15	78	

- USB
- email
- put it on the cloud and share the link
- put it on the website

**Question 11d.**

<b>Marks</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>Average</b>
<b>%</b>	19	33	49	

- It is waste of resources to print 10 additional copies as no one indicated that they were required.
- Printing one slide per page is wasteful and unnecessary.
- The presentation should be printed double-sided.

**Question 12a.**

Marks	0	1	Average
%	25	75	<b>0.8</b>

The purpose of self-paced tutorials is to give the user the ability to learn a skill or task at their own pace.

**Question 12b.**

Marks	0	1	2	3	4	Average
%	46	15	24	5	9	<b>1.2</b>

- Menu – allows the user to go straight to the sections of the tutorial they need.
- Pictures/diagrams – allow the user to easily see what is required or needed.
- Clear step-by-step instructions – easy to follow steps allow the user to control the pace.

**Question 12c.**

Marks	0	1	2	Average
%	65	16	19	<b>0.6</b>

- All text should be in the same font and size, which helps with consistency and allows for the users to easily follow instructions.
- All pictures/diagrams should be labelled as this shows the users which pictures relate to which sections of the tutorial.
- Considering who/what are the clients/users for this self-paced tutorial will determine the language used.

**Question 13**

Marks	0	1	2	3	Average
%	5	8	57	30	<b>2.1</b>

	Paper-based documentation	Electronic documentation
Advantage	<ul style="list-style-type: none"> <li>• can use without an electronic device or the internet</li> <li>• some people are more comfortable using a paper-based document</li> <li>• can easily add own annotations/highlighting, etc.</li> <li>• specialised formats are possible; for example, hot keys on a keyboard</li> </ul>	<ul style="list-style-type: none"> <li>• easier to access from anywhere; for example, company website, cloud storage, VPN</li> <li>• are easier to update</li> <li>• less costly to update</li> <li>• easier to distribute updates</li> <li>• easier to search for information</li> <li>• help files can be integrated into the software/product and can be task-sensitive</li> <li>• can use hyperlinks to provide additional information where required</li> <li>• can have multimedia, sound and video tutorials/explanations on YouTube, company website and the internet</li> </ul>

	<b>Paper-based documentation</b>	<b>Electronic documentation</b>
<b>Disadvantage</b>	<ul style="list-style-type: none"> <li>costly</li> <li>must distribute paper</li> <li>cannot search easily (searching is limited to the detail in the table of contents and index)</li> <li>many people prefer electronic format to paper</li> </ul>	<ul style="list-style-type: none"> <li>need access to a computer/tablet and possibly the internet</li> <li>even electronic documentation can be out-of-date if it is not maintained</li> <li>can be lost, damaged, corrupted or altered</li> <li>many people prefer paper-based documentation</li> </ul>

**Question 14a.**

<b>Marks</b>	<b>0</b>	<b>1</b>	<b>Average</b>
<b>%</b>	48	52	<b>0.5</b>

The technician does not ask Yanni for more information or to see his notebook because repairing the damage to the hardware of the leased notebook is not part of the local ICT technician's job as this is a private warranty issue. The technician has referred Yanni to the company that supplied the notebook in order to have his problem solved. A service-level agreement would deal with procedures to be followed, which is the manufacturer's responsibility in this case.

**Question 14bi.**

<b>Marks</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>Average</b>
<b>%</b>	39	42	19	<b>0.8</b>

The technician should talk Yanni through the process of identifying that he is not connected to the school wireless network and explain how to call up the option of his login into the network.

**Question 14bii.**

<b>Marks</b>	<b>0</b>	<b>1</b>	<b>Average</b>
<b>%</b>	45	55	<b>0.6</b>

Accessing the wireless network is within the school's local ICT technician's job description. There are no breaches of the lease agreement to consider.

**Question 14c.**

<b>Marks</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>Average</b>
<b>%</b>	36	35	29	<b>0.9</b>

The computers in the computer lab are owned by the school and the school's ICT department is responsible to ensure that the lab functions. Therefore, the technician would offer to attend with two mice as soon as possible or as soon as they were able, or suggest that the teacher sends a student to collect them.



**Question 14d.**

<b>Marks</b>	<b>0</b>	<b>1</b>	<b>Average</b>
<b>%</b>	27	73	

At the completion of each of the problems, the technician should complete the log.

**Question 15a.**

<b>Marks</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>Average</b>
<b>%</b>	15	56	29	

Techniques that the ICT department could use to gather information on its electricity use include:

- check the utility bills
- measure the power usage for various hardware components.

**Question 15b.**

<b>Marks</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>Average</b>
<b>%</b>	40	41	19	

Strategies involving hardware that could reduce electricity use include:

- various power-saving options for printers, monitors and computers
- hardware choices; for example, inkjet versus laser printers.

**Question 15c.**

<b>Marks</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>Average</b>
<b>%</b>	25	27	48	

Strategies involving software that could reduce electricity use include:

- include power settings monitoring usage with defined responses
- software-driven automatic shutdown of computer.

**Question 15d.**

<b>Marks</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>Average</b>
<b>%</b>	24	54	22	

Advantages of the solar panels for the ICT department include:

- although the solar panels won't reduce electricity usage, they will reduce the amount that needs to be purchased
- they produce their peak generation when the ICT department uses the most electricity
- provides 'clean' power.

**Question 16**

Marks	0	1	2	Average
%	30	27	43	1.2

Students needed to explain the electricity use in the server room for July 2014.

Students needed to identify that it was the month with the highest energy use and explain that the cause of this higher energy use was peak season.

**Question 17**

Marks	0	1	2	3	Average
%	9	22	55	13	1.7

Step	Number
<i>accept license agreement</i>	4
<i>check hardware requirements prior to attempting the installation</i>	1
<i>continue with installation wizard until asked to reboot</i>	6
<i>select install</i>	3
<i>select installation option (typical or custom)</i>	5
<i>insert CD/DVD/USB</i>	2

**Question 18a.**

Marks	0	1	2	Average
%	28	45	27	1

- a reduction in the number of printers in the organisation, therefore less use of power
- a reduction in the use of consumables
- encourages staff to print less as they have to walk to the printer

**Question 18b.**

Marks	0	1	2	Average
%	33	35	32	1

- comparing costs of paper, power and consumables from before implementation and after
- recording staff paper usage before and after implementation