

CAMBRIDGE TECHNICALS LEVEL 2 (2016)

Examiners' report

IT

05882, 05883, 05884

Unit 1 January 2021 series

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Introduction

Our examiners' reports are produced to offer constructive feedback on candidates' performance in the examinations. They provide useful guidance for future candidates.

The reports will include a general commentary on candidates' performance, identify technical aspects examined in the questions and highlight good performance and where performance could be improved. The reports will also explain aspects which caused difficulty and why the difficulties arose, whether through a lack of knowledge, poor examination technique, or any other identifiable and explainable reason.

Where overall performance on a question/question part was considered good, with no particular areas to highlight, these questions have not been included in the report.

A full copy of the question paper is attached as an Appendix at the end of this report. The mark scheme can be downloaded from OCR.

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General comments on the paper

Due to the extraordinary circumstances and the Covid-19 pandemic the entry for the January 2021 series was much lower than in January 2020 as many centres did not open for examinations. Therefore, this report will not compare the performance of this cohort with those of previous series. Questions 20 and 22 did not perform as expected so in fairness to all candidates we removed these two questions and marked candidates out of 38.

Learners taking the CBT assessment for this unit in January didn't perform as well as previous cohorts. The mean was lower than seen in previous January series. Centres would be advised to focus not only on the knowledge requirements across the five learning outcomes for this unit but also ensure learners are familiar with the different assessment styles used in this summative assessment – i.e. linking boxes, true/false, diagram-related questions and select 'three'. Learning outcome 4 had strong answers this series.

Learning outcome 1: questions 1 – 6, 8, 9 and 16

This LO covers knowledge of hardware components and performance wasn't as strong as the other LOs. LO1 is one of the weightier LOs within the unit and as a result centres should spend more time with their learners developing knowledge around types of computer systems, networks, connectivity methods, topologies, network protocols, computer components, devices and fault diagnosis. A majority of candidates were able to identify that a scanner should be used to input photographs from a book into a computer. Candidates found it more difficult to understand the use of connection ports, network protocols and BIOS functions.

Learning outcome 2: questions 7, 10 – 15, 17 – 19

Performance on this LO was fair overall; particularly given this is the heaviest weighted LO within the unit. A majority of candidates knew that a database would be the most suitable software application for storing data, and also that the Android system was developed especially for touchscreen mobile devices. Candidates found a question asking them to link the description of a task with the most appropriate software challenging.

Learning outcome 3: questions 21, 23 – 27

The focus of LO3 builds on LO1 and LO2 and requires learners to demonstrate knowledge of how to install and upgrade hardware and software. Performance was mixed this series. Only a small number of candidates correctly identified three statements relating to health and safety responsibilities of a new IT technician. However, the vast majority of candidates did correctly identify that a software upgrade was an installation of an improved version of the software.

Learning outcome 4: questions 28 – 35

Performance on this LO was very good, as usual. Particularly strong performances were seen in questions about benefits of using VoIP, the use of fitness trackers, online shopping, identifying non-cloud related activities and correctly identifying a description of what a social networking site is.

Learning outcome 5: questions 36 – 40

This LO carries the lowest weighting in the unit and performance of candidates was good overall. The LO is holistic in nature and draws together the learning from the unit to reflect on the practical uses of IT within business. Candidates did very well on identifying collaboration methods such as screen sharing, teleconference/video conference and video calling. The lowest outcomes were for a question on linking methods of data capture with activities.

Appendix 1 Questions

Question 1

Which of the following connection ports can carry only analog information?

- A
- B
- C
- D

[1]

Question 2

A journalist has found some photographs in an old book and wishes to include them in a word-processed article. The photographs have to be input into her computer.

Which of the following devices would she use to input the photographs?

- A
- B
- C
- D

[1]

Question 3

A hotel allows guests to connect their laptops to its local area network (LAN).

Which of the following network protocols is used to provide a guest laptop with a network address?

- A
- B
- C
- D

[1]

Question 4

A cafe allows customers to use its LAN's Wi-Fi access points to connect their smartphones to the internet.

Which of the following networking components would be used to connect the café LAN to the internet?

- A
- B
- C
- D

[1]

Question 5

A dongle is a small device that can be plugged into another device to provide additional functions.

Which of the following functions can be provided by a dongle? (Select **THREE**).

- A ☐ Connection to Wi-Fi
- B ☐ Copy protection for software
- C ☐ Reading external flash cards
- D ☐ Writing a file to a CD-R

[1]

Question 6



The diagram shows six laptops connected in a network.

Which of the following most accurately describes the network topology used to connect the laptops?

- A
- B
- C
- D

[1]

Question 7

Which statement describes the reason for creating the Android operating system?

- A
- B
- C
- D

[1]

Question 8

The BIOS in a computing device has several functions.

Select **THREE** functions of the BIOS from the statements shown below:

- A ☐ Allows the user to carry out tasks on the computer
- B ☐ Checks the BIOS code itself
- C ☐ Enables the system to run software applications
- D ☐ Finds out the size of the main system memory
- E ☐ Identifies which devices are available for booting the system

[1]

Question 9

During the start-up of a new laptop, a power-on self-test (POST) is carried out. During the POST, the laptop stops and a series of long and short beeps is repeatedly heard from the speakers.

What is the most likely reason that the laptop is producing these beeps?

- A ☐ The audio system is not working
- B ☐ The display adapter is not working
- C ☐ The laptop is working properly
- D ☐ The POST is testing the loudspeakers

[1]

Question 10

The operating system (OS) of a desktop computer system has a number of functions.

Which of the following is **NOT** a function of the OS?

- A Allocating memory to application software run by a user
- B Controlling the hard disks fitted to the computer
- C Detecting and removing malware from the computer
- D Organising the amount of CPU time available for a task

[1]

Question 11

Click the description of a task and then link it by clicking on the most appropriate software for carrying it out.

To remove a link, select the linking line.

Designing an advertising poster
for a notice board

Managing customer support for a
mobile phone company

Designing a case for a
smartphone

Controlling a machine making a
part for a laptop keyboard

CAD

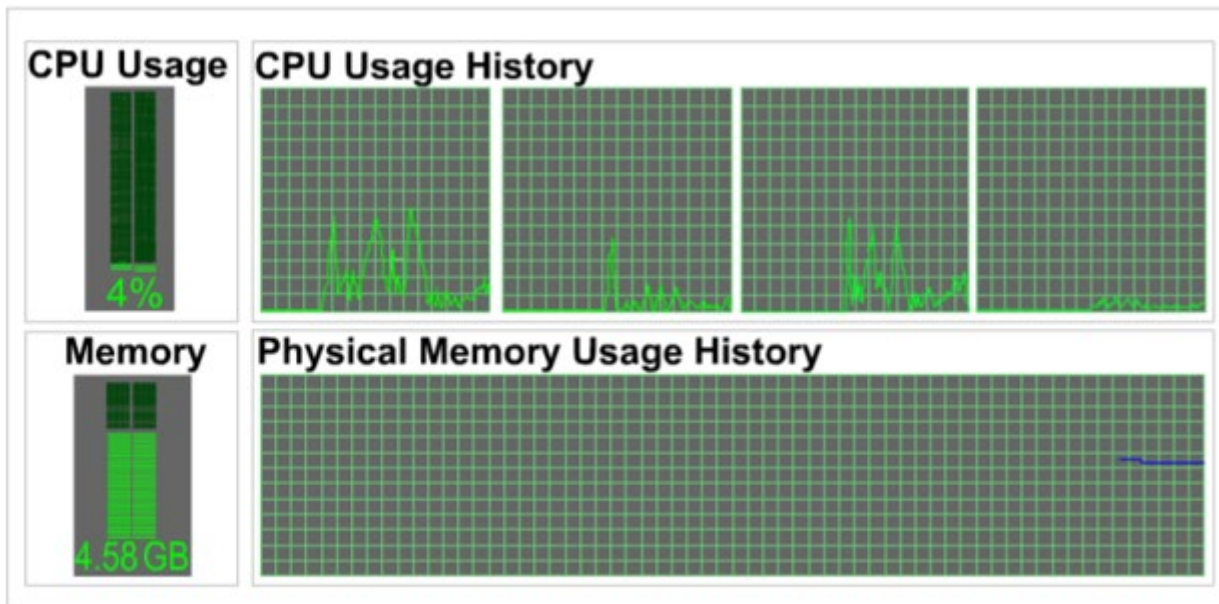
DTP

CAM

CRM

[1]

Question 12



The diagram shows the output of utility software running on a laptop.

Which of the following utilities would produce this output?

- A
- B
- C
- D

[1]

Question 13

Apps made for mobile devices can be put into categories.

Which of the following best describes a 'native' app?

- A A native app is built using multi-platform technologies
- B A native app runs on all operating systems for mobile devices
- C A native app will only run on a specific mobile device operating system
- D A native app will work in a web browser

[1]

Question 14

A 'hybrid' app is a type of app that works on most types of mobile device.

Which of the following is a limitation of a hybrid app?

- A Hybrid apps are not easy to update on all devices
- B Hybrid apps are not costly to create and maintain
- C Hybrid apps do not look exactly the same on all mobile devices
- D Hybrid apps do not use the same code when running on different mobile devices

[1]

Question 15

Read the statement below and select if it is **True** or **False**.

Bespoke applications are developed for a specific task when no 'off the shelf' applications are available.

True

False

[1]

Question 16

Cache memory is used in many computer systems.

Select **THREE** statements that describe the use of cache memory in a computer system.

A Cache memory allows high speed access to data

B Cache memory is random access memory (RAM)

C Cache memory is read only memory (ROM)

D Cache memory is usually placed close to the CPU

E Cache memory stores data that is rarely used by the CPU

[1]

Question 17

Email is used for communication by businesses but it has some disadvantages.

Select **THREE** disadvantages to businesses of using email.

- A All email messages are automatically encrypted to keep them safe
- B Both the sender and the recipient have to be online at the same time
- C Copies of emails can be stored on servers long after the original has been deleted by the sender and recipient
- D Email attachments can carry malware that can disrupt computer systems
- E Email messages pass through many computer systems before reaching their destination so are quite easy to intercept

[1]

Question 18

An IT technician has decided to install the Linux operating system on an old laptop.

Which of the following could be the main reason Linux has been chosen for the old laptop?

- A Linux has a much greater range of business applications than other operating systems
- B Linux makes very efficient use of system resources on the old laptop
- C Linux works in exactly the same way as other operating systems on the old laptop so is easy to learn to use
- D Linux will run all the software from other operating systems on the old laptop

[1]

Question 19

A database is the most suitable software application for use by:

Select **ONE** answer.

- A
- B
- C
- D

[1]

Question 20

A new desktop computer system is being set up by an IT technician. The necessary steps taken by the IT technician are shown below.

Drag and drop the steps below to put them in the correct order. The first one has been completed for you.

Carry out updates to the system.

Configure the mouse, keyboard, screen display.

Create accounts for users.

Install the operating system.

Set up and test the hardware for the new system.

[1]

Question 21

Which of the following statements best describes the process of 'risk assessment'?

- A Ensures that all health and safety issues are reported
- B Identifies and eliminates all risks to a system
- C Makes decisions on what equipment to use in a system and how much it should cost
- D Makes judgments on what can go wrong with a system and how likely it is to go wrong

[1]

Question 22

User acceptance testing is carried out when a new software application is developed.

Which of the following is **NOT** part of user acceptance testing?

- A Carrying out and documenting the tests
- B Planning the user acceptance tests
- C Selecting the team of testers
- D Signing off the software when it is ready for full release

[1]

Question 23

Read the statement below and select if it is **True** or **False**.

When handling components to install in a computer system, you are advised not to wear wool clothing for protection.

True

False

[1]

Question 24

The following statements show a number of the tasks to be carried out when replacing a computer's hard disk with a new one.

Which task should be carried out first?

- A Identifying the health safety requirements for the replacement
- B Making a backup of the new system
- C Making sure that the new hard disk is compatible with the computer system
- D Testing the new hard disk to make sure that it is working properly

[1]

Question 25

Which of the following statements most accurately describes a software upgrade?

- A Installing extra code to allow use of new hardware
- B Installing extra code to solve a security problem
- C Installing a different version of the software
- D Installing an improved version of the software

[1]

Question 26

Rachel, an IT technician, is employed by a company to install new computer systems.

Select **THREE** statements that apply to the IT technician when she is working for the company.

- A Must co-operate with employers about health and safety matters
- B Must provide the company with information about the health and safety risks when working
- C Must take care of her own health and safety when working
- D Must take care of the health and safety of others when working
- E Must write a health and safety policy for the company

[1]

Question 27

A clerk works for a large company. He spends all of his working day entering data into a computer system. The clerk has asked for a full eye sight test.

Read the statement below and select if it is **True** or **False**.

The company has stated that it is not required to pay for the test.

True

False

[1]

Question 28

Voice over Internet Protocol (VoIP) is used by businesses for communications.

Which of the following is a benefit to a business of using VoIP?

A A high-speed connection to the internet is required

B A VoIP telephone is required to use the system

C Call forwarding and voicemail can be provided

D No calls can be made if all power is lost to the system

[1]

Question 29

Using the internet has risks.

Click the risk and then link it by clicking on the most appropriate word or phrase to describe it.

To remove a link, select the linking line.

Creates many copies and spreads through email attachments

Obtains credit card details by sending an email pretending to be a trusted person

A fraud committed by using another person's credit card number without their permission

Software that gathers data from a computer without the user's knowledge

Identity theft

Phishing

Spyware

Virus

[1]

Question 30

An athlete wants to monitor her body using a wearable fitness tracker during training for a race.

Which of the following measurements would be made by a fitness tracker worn on her wrist?

A Body mass index

B Body weight

C Heart rate

D Overall height

[1]

Question 31

A doctor has a computer system to help with the diagnosis of illnesses. The computer system has algorithms that can learn by using and processing the information provided by the doctor about the illness.

This is an example of:

A Artificial intelligence

B Augmented reality

C Health monitoring

D Virtual reality

[1]

Question 32

Many retailers allow customers to purchase goods online.

Which of the following statements is a benefit to a customer of being able to purchase goods online?

A Customers can always have their purchases at once

B Customers can easily examine the goods before purchase

C Customers can quickly compare prices from a variety of retailers

D Customers can spend a lot of time searching for goods online

[1]

Question 33

Which of the following is **NOT** an example of cloud related activities?

- A
- B
- C
- D

[1]

Question 34

Banks have made many of their financial services available to customers to use on the internet.

Which of the following can **only** be carried out by using internet banking?

- A
- B
- C
- D

[1]

Question 35

Social networking sites on the internet allow people to communicate with other people.

Which of the following statements is the **BEST** description of a social networking site?

- A A web site that allows people to post videos for others to watch online
- B A web site that allows people to send and receive emails from other people who are online
- C A web site that allows people to stay connected with others in an online community
- D A web site where one person posts comments for others to read online

[1]

Question 36

A researcher has used a questionnaire to collect data for research into the varied eating habits of people in a local community.

How can the researchers try to avoid bias when giving out the questionnaire to people?

- A Give the questionnaire to all the people as they go about their shopping in the community
- B Give the questionnaire to all the people by posting it to their homes in the community
- C Give the questionnaire to all the people eating only in a local fast food restaurant
- D Give the questionnaire to all the people eating only in local pub restaurants

[1]

Question 37

	January	February	March	April	May	June
Task 1						
Task 2						
Task 3						
Task 4						
Task 5						
Task 6						
Task 7						
Task 8						
Task 9						
Task 10						

The diagram shows a scheduling chart being used in the management of a project.

This is an example of:

- A
- B
- C
- D

[1]

Question 38

Read the statement below and select if it is **True** or **False**.

It is considered rude to use ALL CAPITALS when using online chat to work with others.

True

False

[1]

Question 39

Click the description of a method of collaboration and then link it by clicking on the most appropriate name for it.

To remove a link, select the linking line.

Using a public communications network to transmit both the audio and video of a conversation between two people

Using computer networks to transmit both the audio and video of a meeting of ten people

Using computer networks to transmit only the audio of a meeting of ten people

Viewing the display of a computer on another at the same time to view a document on both computers

Screen sharing

Teleconference

Video call

Video conference

[1]

Question 40

Click the description of a data capture method and then link it by clicking on the most appropriate name for it.

To remove a link, select the linking line.

Capturing hand-written printed letters and numbers from image files	Intelligent character recognition
Capturing the text of a paper document by speaking it into a computer using a microphone	Manual data capture
Converting the text of a paper document by scanning it into a computer so it can be searched	Optical character recognition
Copying a paper document by retyping it into a computer using a keyboard	Voice recognition

[1]

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