Unit 1: Information technology systems

# Test 2: 9 October 2017

Topic A: Digital devices in IT systems

The exam has 20 marks. You should take 27 minutes to complete it.

Name: Will Watson

Moderator’s name:

Moderator’s mark:

1) Orla is a scientist specialising in the collection of worldwide weather data.

Orla wants to purchase a new computer for use as part of a data logging system for an onsite weather station.

The table shows the specifications of two computers Orla is considering.

                    Computer 1                          Computer 2

Processor      Dual-core 4.2 GHZ                Quad-core 2.1 GHZ

RAM              4GB                                    12GB

Storage         120 GB Solid state                1 TB Hard disk drive

Connectivity   Ethernet                              Wi-Fi

                    4 × USB 3.0                         2 × USB 3.0

                    1 × VGA                              1 × VGA

                    1 × HDMI                             1 × HDMI

                    Bluetooth®

Assess the suitability of the two computer specifications for use in the data logging system.

8 marks

Computer 2 is overall a better computer with a quad-core processer, 12GB of RAM which is

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3 times as much as computer 1 and 1TB of storage which is a lot better than computer 1.

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Some of computer 1’s specifications are not desirable for the purpose, you would want

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Ethernet over wireless as it is more reliable and if you were to go with computer 1 then you

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would have to option of removable external hard drives as there are 4 USB ports instead of

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the two that computer 2 has. Computer 1 has a slower processor, less RAM and less storage

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but, as previously mentioned, you can attach four external hard drives which will ultimately

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give you more space than computer 2. The processor isn’t really a problem as you will only

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be needing it to process data records and not anything that needs a lot of process power.

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Lastly, Bluetooth is a good option to have to quickly connect and share information is it can

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Be unnecessary. I would personally go with computer 1 as it is likely to be cheaper and it

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gives you exactly what you would need.

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2) Fizpat-Williams is an architectural company providing design services for housing and retail unit developments. The company uses a local area network which has desktop PC clients, connected to the server using an Ethernet only Local Area Network.

The computer systems are used for:

- general office tasks

- managing the company payroll

- computer-aided design (CAD), architectural drawing, 3D modeling

- internal and external communication

Fizpat-Williams have decided to invest in mobile technology for staff to use when they are in the office, travelling and when working with clients on architectural projects. The company intends to invest in a combination of tablet and laptop devices to be used alongside their current network and desktop PCs.

Evaluate the company’s decision to invest in mobile technology.

12 marks

I think mobile technology is a good investment for the company as those who are looking to hire an

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architectural company. There are many scenarios where either the client is struggling to use

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a companies’ system or the client can’t travel to the place required due to not being able to

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drive, not having enough time and troubles with public transport so for a company to invest

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in a mobile feature is a good idea as they can come to you and do it from your own house

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while walking you through how to use their service an helping them achieve what they

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wanted the service for just by the employee driving to them with a tablet.

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a possible disadvantage to using mobile technology is the cost of the setup, the company has

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to think about how many tablets and laptops to purchase and disperse to the employees, who and

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where is going to host the services and for what price. There are many variables to think

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about when setting up a mobile service which could cost them a lot of money.

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