T Level Technical Qualification in Digital Business Services (603/6902/4)

Route Core and Pathway (Paper A)

Paper number:	**P002242**	Time allowed:	**2 hours**
Assessment date:	**Tuesday 5 December 2023**	Time:	**1:00pm – 3:00pm**

Student instructions

- Use black ink.
- Fill in the boxes at the bottom of this page.
- Answer **all** questions.
- Read each question carefully.
- You **must** write your responses in the spaces provided. There may be more space than you need.
- You may do rough work in this answer book. Cross through any work you do not wish to be marked.
- If you use a supplementary answer booklet, you must add your student name, student number and provider number to the front cover of the booklet. Insert your supplementary answer booklet inside this question paper at the end of your exam.

Student information

- The marks available for each question are shown in brackets. This is to help you decide how long to spend on each question.
- The maximum mark for this paper is 106 (including 6 for the quality of written communication (QWC) and use of specialist terminology).
- In questions **10** and **18**, you will be assessed on the QWC and use of specialist terminology.
- You may use a calculator.

Do not turn over until the invigilator tells you to do so.

Please complete / check your details below

Student Name:

Provider Name:

Student Number:

Provider Number:

For the multiple-choice questions, write **A, B, C** or **D** in the answer space. Do **not** circle **A, B, C** or **D** in the question.

For example:

Answer <u> **C** </u>

If you change your mind about an answer, you must put a cross through your original answer and then write your new answer next to it.

For example:

Answer ☒ **B**

Section A: business context and culture

This section is worth 41 marks, plus 3 marks for QWC and use of specialist terminology. Answer **all** questions in the spaces provided.

1   State **one** key factor that can influence the business environment.

[1 mark]

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2   Describe **one** measurable value to customers using digital services.

[1 mark]

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3 Diamond Farms grow crops and raise animals which they then sell onto other retailers to sell to customers. They are considering opening an online farm shop to sell their products direct to customers but are new to technology and are worried about data theft and hackers.

(a) Identify **one** type of hacker who could target the farm shop.

[1 mark]

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(b) Explain **one** reason why the identified hacker might want to target the farm's online shop.

[2 marks]

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Please turn over for next question

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4 Super Sandwich Shop is a small business which sells a range of sandwiches and wraps direct to its customers. It has recently noticed that 95% of its transactions are by digital payment methods. It would like to only accept digital payments.

(a) State **one** risk that small businesses face by only accepting digital payment methods.

[1 mark]

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(b) Explain **one** way this risk might affect Super Sandwich Shop.

[2 marks]

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5   Junior Junkyard is a business which specialises in renovating metal objects which it sells online. Recently, the business was sold, and the new owners are concerned about the way the online business is being run. The new owners have decided to introduce customer accounts to its website.

As part of the changes, Junior Junkyard is using a change advisory board (CAB) to provide feedback on its changes.

(a)   Describe **one** form of feedback which a CAB could provide.

[1 mark]

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(b)   Explain **one** way a CAB can help Junior Junkyard's new owners to introduce customer accounts to the website.

[2 marks]

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Please turn over for next question

6 Lotls Marine Services is a business which provides electronic equipment such as GPS, satellite phones and electronic devices to businesses which operate at sea. It is developing virtual reality (VR) training products which would enable crews to practise their firefighting and marine emergencies, like sinking in a safe environment on land.

(a) State **one** stakeholder that a business would need to consider when developing VR training products.

[1 mark]

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(b) Explain **one** reason why Lotls Marine Services needs to consider the identified stakeholder's views for the new VR training products.

[2 marks]

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7 Safia is looking to start a small business selling personalised items like t-shirts and hats at events such as concerts, festivals, and fairs. The items will be created by customers on an app on their phones, then printed while they wait.

(a) Identify **two** end user factors which would need to be considered when designing an app.

[2 marks]

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(b) Explain how each of these factors identified will support Safia to meet customer needs.

[4 marks]

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Please turn over for next question

8 Noah owns a driving school which he advertises mainly via social media platforms and his website. Noah is aware multiple competitors have recently had several confidentiality breaches and unprofessional posts on their online platforms, and he would like to introduce a code of conduct for all his employees to ensure that this does not happen in his business.

Assess why Noah needs to have a code of conduct for his business.

[3 marks]

08P00224228

9 The local library has recently installed an eSports gaming suite and its staff have noticed that users have poor body posture when using gaming chairs and some move screens closer to them when playing. They have carried out a risk assessment and are concerned about the impact of unsafe or inappropriate use of technology and plan to implement mitigation techniques.

Discuss the likely impact of **two** mitigation techniques the library staff can use to reduce the risks faced by the users of the eSports gaming suite.

Your response must include reasoned judgements and conclusions.

[6 marks]

Please turn over

10 Zara is an IT consultant for a new small to medium-sized enterprise (SME) consisting of five veterinarian practices and 30 employees. Zara's task is to create a website for the business.

The website must showcase all the services offered by the SME and have separate sections for each veterinarian to provide more information about their practice. The website must allow for booking appointments and accept payments for all five veterinarian practices, with a variety of popular online payment options available.

Additionally, the website should provide virtual video consultations with clients. Three of the veterinarian practices have no experience with online booking, and none have ever accepted payment for their services through their website.

Evaluate the external factors which the veterinarian practices will need to consider as they implement the changes to their website and booking systems.

Your response must include reasoned judgements and conclusions.

[**12 marks, plus 3 marks for QWC**]

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Section B: digital environments, diversity, and inclusion

This section is worth 39 marks, plus 3 marks for QWC and use of specialist terminology. Answer **all** questions in the spaces provided.

11   Which of the following would be a way to address demographic imbalance in the digital sector?

[1 mark]

   A   Applying digital inclusion principles

   B   Employ additional workforce

   C   Implement exclusive recruitment practices

   D   Invest in Virtual Reality Headsets

   Answer _____

12   State what HTTPS stands for.

[1 mark]

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13   Quilters is a chain of sewing shops which create and sell its patterns over the internet and in stores. It pays several subscriptions to different businesses for all the software it needs. It has recently become aware that many of their PCs are running out of storage space, and it will be expensive to upgrade. It has heard about Platform as a Service (PaaS) and would like to know more.

(a)   Describe what PaaS is.

[1 mark]

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(b)   Explain **two** ways in which Quilters could benefit from the use of PaaS.

[4 marks]

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Please turn over for next question

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14 Hive Minded is a local business incubation service which offers shared workspace and support to small businesses without their own premises. It recently decided to open a new shared workspace on the first floor of a local office complex, and its services are open to all small business owners.

Hive Minded is writing its policy to ensure it is compliant with the Equality Act 2010.

(a) Describe **one** type of discrimination that business owners may need to consider when writing a policy.

[1 mark]

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(b) Explain **two** different ways in which Hive Minded can adapt its new workspace to ensure that it does not discriminate against its customers.

[4 marks]

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15 FixU is a new company looking to offer first aid courses to the public and private sector customers, with both face-to-face and online components. However, trainers will initially be accessing the company app and website using personal devices, which could pose security risks. FixU is developing its IT infrastructure and is seeking advice on suitable networks for its business.

(a) Describe **two** differences between local area networks (LAN) and virtual private networks (VPN).

[2 marks]

(b) Explain how **both** LAN and VPN networks would allow FixU's trainers to access the app and website more securely.

[4 marks]

Please turn over for next question

16 Dylan & Co Marketing is a small marketing agency which creates social media campaigns for clients. Dylan & Co Marketing has expanded its services by hiring a graphic designer, website designer and video editor after increasing its client base. It has audited its IT systems and concluded that updating its hardware is necessary to facilitate video editing and graphic design.

Discuss **one** hardware component Dylan & Co Marketing will need to ensure its new IT systems are able to offer these new services.

Your response must include reasoned judgements and conclusions.

[3 marks]

17 WeCook2U delivers meals and meal preparation boxes to customers from a wide range of demographics, including age. The company has been receiving complaints about the time it takes to place orders via phone or email.

To address this, the owner has decided to introduce an app for customers to access menu choices and confirm their selections. The company will stop taking email orders immediately and phase out phone call orders within six months.

(a) Assess the potential impact of WeCook2U moving to digital services.

[3 marks]

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(b) Discuss how WeCook2U can improve its plans to make it more inclusive.

Your response must include reasoned judgements and conclusions.

[3 marks]

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Please turn over for next question

18 An apprenticeship training provider won a grant to replace its IT system. Approximately 100 on-site students and 500 remote students use its facilities, along with 10 on-site and 100 remote employees. The provider will need to upgrade its IT infrastructure in the next two years and is looking to invest in a system that will enable it to meet growing demand from students both on-site and remotely.

The directors recently attended an IT conference and learned about virtual computing systems which they are interested in, but they are worried about the ongoing costs of virtual computing when compared to just upgrading the hardware.

Evaluate whether a physical or a virtual system would be better to install for the training provider.

Your response must include reasoned judgements and conclusions.

[12 marks, plus 3 marks for QWC]

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Please turn over

Section C: learning and planning

This section is worth 20 marks.
Answer **all** questions in the spaces provided.

19   State **one** stage of Gibbs' reflective cycle.

[1 mark]

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20   State **one** reason to undertake quality management as part of project planning.

[1 mark]

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21   The Pink Llama runs restaurants of varying cuisines and prices across the country. It plans to open a new restaurant and is discussing cuisine and pricing.

      To help with decision-making, it is carrying out market research to study the industry and community.

(a)   State what is meant by the term bias.

[1 mark]

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(b)   Explain **one** reason why it is important for The Pink Llama to check for bias when using sources of information to make business decisions.

[2 marks]

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22 Tudor Entertainment rents and sells fancy dress costumes online to retailers. It plans to accept orders from customers directly, requiring a change in payment methods. Currently, payment is made after receiving the goods, but the company will also accept payment at the time of purchase. This change will necessitate modifying its account, which management acknowledges will incur additional expenses.

(a) Describe what a budget is.

[1 mark]

(b) Explain **one** reason why it is important that Tudor Entertainment sets a budget.

[2 marks]

Please turn over for next question

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23 Concentrated Gamers is an online business which sells console and PC games. It sells a range of physical games where the game is shipped to customers, and it also sells digital downloads so customers can get immediate access to its games.

The business is considering using emerging technology to benefit the business. As part of its research, it has come across blockchain and would like to use this for the business.

(a) Describe what blockchain is.

[1 mark]

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(b) Explain **one** way Concentrated Gamers could utilise blockchain for its business.

[2 marks]

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24 Knit n Go is a craft-based business which currently sells all its products through a single high-street store. Recently, the costs of maintaining the store have increased and the owner has decided it is time to change how the business is operating. The owner is planning to implement a project to develop an online shop so customers can purchase directly from the business.

(a) Identify **one** project planning technique.

[1 mark]

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(b) Explain **one** way the identified project planning technique could help Knit n Go to implement its new project.

[2 marks]

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Please turn over for next question

25 Floofs is a successful cat café. It plans to expand by opening a guinea pig café and is developing an app for both businesses. The app will provide customers with information, available merchandise, and menu details. Floofs aims to have all bookings made exclusively through the app.

Discuss the impact of project planning on the effectiveness of the app and/or business.

Your response must include reasoned judgements and conclusions.

[3 marks]

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26 Easy Intelligence is an organisation which specialises in providing training to medical professionals in new technologies such as using virtual reality and 3D printing. It has recently been asked by a university to create a brand new training module for medical students on using these new technologies to provide better medical treatment.

Assess the impact to the medical students of receiving professional development in new technologies.

[3 marks]

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Document information

To be completed by the examiner			
Question	Mark	Question	Mark
1		14(b)	
2		15(a)	
3(a)		15(b)	
3(b)		16	
4(a)		17(a)	
4(b)		17(b)	
5(a)		18	
5(b)		19	
6(a)		20	
6(b)		21(a)	
7(a)		21(b)	
7(b)		22(a)	
8		22(b)	
9		23(a)	
10		23(b)	
11		24(a)	
12		24(b)	
13(a)		25	
13(b)		26	
14(a)			
		TOTAL MARK	

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