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

Paper A

Paper number:	**P001865**	Time allowed:	**2 hours**
Assessment date:	**Tuesday 13 June 2023**	Time:	**1:00pm – 3:00pm**

Student instructions
- Use black or blue 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.

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 and use of specialist terminology).
- In questions **10** and **21**, you will be assessed on the quality of your written communication (QWC) and use of specialist terminology.

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:

Section A: Culture and context

This section is worth 40 marks, plus 3 marks for QWC and use of specialist terminology.
Answer **all** questions in the spaces provided.

1   Give **one** way that autonomous operation leads to dehumanisation of service.

[1 mark]

2   State **two** types of private organisation.

[2 marks]

3   Lott UK is a medium-sized business with a long established workforce. The
teams use a collaborative approach to complete projects. Lott UK is looking into
migrating its workforce so that all office-based staff will work from home full time.
The business is assessing communication access for staff.

Discuss the factors that Lott UK will need to consider to reduce the possibility of
potential isolation for its workers.

[3 marks]

4 Landingham Services is a consultancy business that advises office staff on how to use digital technology safely. The business specialises in physical problems. A client has a large number of staff who suffer from headaches and back pain as a result of the way they operate their computers.

(a) Identify **two** mitigation techniques that can be used to reduce the physical problems associated with using computer screens for extended periods of time.

[2 marks]

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(b) Explain why **one** of the identified mitigation techniques would be recommended by Landingham Services.

[2 marks]

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Please turn over for the next question

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5 Let by T is a digital business which rents houses and flats to tenants. The business works with homeowners and finds suitable tenants to occupy their properties for fixed-term contracts.

The business aims to maximise profits for its homeowners. The business is a partnership and has been owned by the same family for over 50 years. All funding for the business comes from retained profit.

(a) Identify **two** external stakeholders.

[2 marks]

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(b) Describe how **one** of these stakeholders may be affected by the activities of this business.

[2 marks]

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Please turn over for the next question

6 Butterfield Ltd supplies dairy products to supermarkets, many of which have demanded lower prices to pass on to their customers.

The business has been affected by an increase in interest rates and a long period of recession in the last year. The business has recently borrowed a large amount of money to invest in new machinery.

Explain the impact of **two** economic factors that are currently affecting Butterfield Ltd.

[4 marks]

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Please turn over for the next question

7 A chocolate manufacturer would like to reduce the variety available in its seasonal gift box and is planning to conduct market research to gain customer feedback to help inform the decision of which chocolate to remove from the gift box. A data technician will analyse the customer feedback and prepare a report for the chocolate manufacturer.

Explain how both quantitative **and** qualitative market research can be used by the data technician in their report.

[4 marks]

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8 CJJ Co have recently digitalised operations in their warehouse and factory. They have introduced an app that allows staff to share information about quality issues and managers can now access detailed database reports on production statistics.

Many systems are now automated. For example, daily reports on production errors and delivery times are emailed to staff. Managers now work from home but can access the control systems for the factory from their laptops.

Assess the value that digitalisation brings to the operations function of CJJ Co.

[3 marks]

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9 D-Moss Dev is a small software development company that focuses on applications for clients in the farming industry. The business creates systems to control the production of tractors and other equipment and are regularly researching new uses for their apps. They also develop money management systems that allow farmers to keep track of money spent and earned.

Discuss ways that digitalisation may affect the processes used by D-Moss Dev.

[3 marks]

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Please turn over for the next question.

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10 Sherborne Seaborne is a shipping company which is planning to digitalise its staff management systems. The company has operated in the UK for 50 years and many staff are very reluctant to adapt to the new system being proposed. The marketing department is particularly concerned about the impact of the changes on workload.

The management team is preparing a plan to implement their new systems. A survey shows that staff do not understand the proposed changes or why they have been proposed.

Discuss the technical change management preparation and planning that should be carried out by Sherborne Seaborne in order to successfully implement their new systems.

[12 marks, plus 3 marks for QWC]

Please turn over

Section B: Diversity, inclusion and digital environments

This section is worth 37 marks, plus 3 marks for QWC and use of specialist terminology.
Answer **all** questions in the spaces provided.

11   Give **one** piece of hardware used in a computer network.

[1 mark]

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12   Identify **one** method of storing large quantities of digital photographs.

[1 mark]

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13   Identify **one** approach to addressing demographic imbalance in the digital sector.

[1 mark]

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14 To-By is an educational publishing business. The business uses virtual machines to work with writers and editors who live and work in different countries. They regularly need to move large amounts of data around the world.

In meetings, staff often have to work together on a single document, sharing screens. The business has built a brand image as environmentally friendly and prides itself on sticking to this reputation.

(a) Identify **one** benefit of using virtual machines to the business.

[1 mark]

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(b) Explain how the identified benefit of using virtual machines will impact To-By.

[2 marks]

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Please turn over for the next question

15 Booj is a communications company that trains technical staff for digital businesses. The management are producing a staff guide to network protocols. Their new client wants staff to understand which email clients can be used by staff for different tasks.

Describe **two** email protocols that could be included in Booj's guide.

[2 marks]

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16 Noah has recently started a new job as a network engineer for a national esports team. The team have recently lost a number of high-profile tournaments due to a delay in gameplay.

The team have been using a VPN but would like Noah to advise them whether they should stick with VPN or use WAN instead.

Assess which option would be the most suitable network for Noah to use for the esports team.

[3 marks]

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17 Felenders is a manufacturer of musical instruments. The management of the business have implemented a more resilient digital environment after a number of security problems. Hackers had attempted to penetrate systems to steal designs and staff data had been stolen by an unhappy employee.

(a) Identify **two** benefits of a resilient digital environment.

[2 marks]

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(b) Explain how **one** of these benefits could help to protect Felenders against the security problems that they may have faced.

[2 marks]

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Please turn over for the next question

18 Molges and Co is a law firm that represents clients in the digital sector. They have a diverse workforce, with staff of different religions, ages and genders. They are carrying out a review of their policies to ensure that they meet the Equality Act 2010.

Explain **two** ways in which Molges and Co can meet the obligations of the Equality Act 2010 with regards to flexible working hours and time off for staff.

[4 marks]

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19 Byer Training produces training material for businesses in the retail sector. Staff at the business have a lot of creative ideas that have won awards for the company.

The business always has a large number of applications when it advertises jobs. Many staff are from diverse backgrounds and have always given the company good reviews on careers websites.

Assess the impacts of diversity and inclusion on Byer Training.

[3 marks]

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20 Souple Design is a business that creates illustrations for digital comics and books. The owners of Souple Designs are struggling to recruit new designers who have the digital illustration skills they need for the business.

Souple Design have recently partnered with the local skills development hub to develop a free qualification for local people aimed at teaching them how to use a range of digital illustration programmes.

Assess how the new qualification will enable Souple Design to be more digitally inclusive.

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Please turn over for the next question

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21 Zafar is a fashion brand which manufactures clothes to order for customers. The business runs a web portal that allows customers to design their own clothes. They are then made to order based on images and measurements provided by customers.

The business holds a great deal of confidential information such as the personal details of customers as well as unique software for turning customer designs into finished products. Zafar already use a lot of online software packages and are considering moving their IT infrastructure to cloud computing.

Analyse the benefits to Zafar of creating a resilient digital environment by introducing cloud computing to the business.

[12 marks, plus 3 marks for QWC]

Please turn over

Section C: Learning and planning

This section is worth 23 marks.
Answer **all** questions in the spaces provided.

22   Give **two** principles of project planning.

[2 marks]

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23   Describe **two** sources of information that can be accessed without using a
computer.

[2 marks]

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24 Yassin is an online homeware company that uses digital technology to manufacture a range of personalised products.

Customers place an order with Yassin which is then manufactured and packaged before despatch.

Yassin has seen an increase in customer orders, and the directors want to streamline the order process to maximise customer satisfaction.

Explain **one** way that critical path analysis could be used by Yassin's directors.

[2 marks]

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Please turn over for the next question

25 Safia is a designer for a digital business. She is new to the industry and wants to develop and grow to take on more challenging roles that would include aspects of team leadership.

Safia's current professional development plan is based on Gibbs' learning cycle. She is reading blogs regularly and watching online video tutorials. She has also signed up to a Massive Open Online Course (MOOC).

Explain how Safia could use the analysis stages of Gibbs' reflective cycle to continue her professional development.

[2 marks]

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26 New Town City Council are preparing to redevelop a large area of land in the city centre into a leisure complex. The project managers have decided to use a drone to support the design phase of the project.

Explain **one** reason why the project managers may have chosen to use a drone for this project.

[2 marks]

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27   AILS is a highly respected entertainment and media law firm known for high-quality service. They advise international clients in the streaming media sector, which is a highly regulated area with new laws emerging and regulations constantly evolving.

Assess the impact on AILS of staff maintaining their professional development.

[3 marks]

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28   A big cat sanctuary needs to create a large outdoor enclosure for their panthers. They have a limited budget, and the panthers are due to arrive in only two months. This is the first time that they will have worked on such a large new project, and they are keen to ensure that it is a success.

(a)   Identify **two** consequences of ineffective project planning.

[2 marks]

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(b)   Explain how **one** of the identified consequences could affect the success of the panther project.

[2 marks]

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Please turn over

29 Our Adventures is a local community group that uses technology to help people with additional needs to travel the world from the comfort of their homes.

a) Identify **one** type of emerging technology.

[1 mark]

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b) Explain how Our Adventures can use emerging technology to enable people with additional needs to travel the world from their homes.

[2 marks]

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30 Ankya design agency are launching a new campaign for a government-funded client during an unstable economic time. The client has set a strict budget for completion of the work. Failing to meet the requirements of the budget could result in Ankya losing future business.

Discuss the impact of effective budgeting on Ankya design agency.

[3 marks]

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This is the end of the external assessment.

Document information

To be completed by the examiner			
Question	Mark	Question	Mark
1		16	
2		17a	
3		17b	
4a		18	
4b		19	
5a		20	
5b		21	
6		22	
7		23	
8		24	
9		25	
10		26	
11		27	
12		28a	
13		28b	
14a		29a	
14b		29b	
15		30	
		TOTAL MARK	