T-LEVELS | Institute for Apprenticeships & Technical Education

Please check the examination details below before entering your candidate information

Candidate surname	Other names

Centre Number | Learner ID

LL-

T Level Technical Qualification in Digital Production, Design and Development (Level 3)

Friday 7 June 2024

Morning (Time: 2 hours 30 minutes)

Paper reference **19537**

Core: Examination

PAPER 2: The Business Environment

You do not need any other materials.

Total Marks

Instructions

- Use **black** ink or a ball-point pen.
  – *a pencil may be used for drawings.*
- **Fill in the boxes** at the top of this page with your name, centre number and Pearson learner ID.
- There are two sections in this question paper. Answer **all** questions in Section A and Section B.
- Answer the questions in the spaces provided
  – *there may be more space than you need.*

Information

- The total mark for this paper is 100.
- The marks for **each** question are shown in brackets.
  – *use this as a guide as to how much time to spend on each question.*

Advice

- Read each question carefully before you start to answer it.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ▶

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Pearson

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SECTION A

Answer ALL questions. Write your answers in the spaces provided.

1 (a) State **two** methods of generating data.

(2)

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(b) State **two** different types of malware.

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(c) Explain **one** potential physical vulnerability to a digital system.

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(Total for Question 1 = 6 marks)

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2 Explain **two** ways that cloud-based technologies support collaboration.

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(Total for Question 2 = 4 marks)

3 An animation studio is upgrading the workstations used by animators.

(a) Explain why the studio would choose liquid cooling for the new workstations.

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(b) An employee needs to use a design package that is incompatible with the new workstations.

Describe how the studio could use this package on the new workstations.

(2)

(Total for Question 3 = 5 marks)

4 Explain why a company would want to keep its client list confidential.

(Total for Question 4 = 3 marks)

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5 Describe **one** potential technical threat to data when using open Wi-Fi networks.

(Total for Question 5 = 3 marks)

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6 A company manufactures children's bicycles.

(a) Explain **two** ways that digital systems can be used to support the company in the marketing of a new bicycle.

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(b) The company wishes to install a new Computer Aided Manufacturing machine.

Explain **one** potential drawback of installing this machine.

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(Total for Question 6 = 7 marks)

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7 A new digital system is being developed for a doctor's surgery.

Explain why it is important to consider cultural awareness and diversity when developing this system.

(Total for Question 7 = 3 marks)

8 Evaluate the effectiveness of Data as a Service (DaaS) to organisations.

(9)

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(Total for Question 8 = 9 marks)

TOTAL FOR SECTION A = 40 MARKS

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SECTION B

Answer ALL questions. Write your answers in the spaces provided.

9 *Emsturnus* is a new web-based bank.

(a) The bank is creating a new website that will allow people to apply to become customers. One end user characteristic that must be considered is the age of potential users.

Explain **two other** end user characteristics that must be considered when designing this website.

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(b) All *Emsturnus'* staff members are supplied with laptops that do not allow the insertion of USB memory sticks.

Explain **two** reasons why this improves the security of *Emsturnus'* digital systems.

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(c) *Emsturnus* needs to reduce the potential vulnerability of data.

Discuss the interrelationship between user identity and data vulnerability.

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(Total for Question 9 = 14 marks)

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10 *Iachus* is a new company that sells private health insurance.

(a) Describe how a multitasking operating system allows the office staff at *Iachus* to use several programs at the same time.

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(b) A team at *Iachus* is developing an update for a digital system.

Explain why it is important to have an effective roll back plan.

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(c) Explain **two** planned for factors that could trigger a need for this update.

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(d) *Iachus* will give a sample group of customers a smartwatch to track their physical activity and health indicators.

Evaluate the suitability of using smart devices to monitor the activity and health data of customers.

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(Total for Question 10 = 19 marks)

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11 A nationwide chain of coffee shops wants to install a new digital system to support all its business needs.

(a) This new system will allow managers to see meaningful data reports.

Describe how data visualisation can be used to present data.

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(b) Reporting is one data analysis tool.

Explain **two other** data analysis tools that could be used to support the business.

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(c) Describe how hashing is used to store user passwords for the new system.

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(d) Explain **two** potential impacts of a security breach of the new system.

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(e) At the end of each day the new system will generate a file that will contain data about items that need to be reordered for each shop.

The files will be sent to a supplier to be processed.

Evaluate whether the developers should use a fixed width text file or a CSV file to store reorder data.

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(Total for Question 11 = 27 marks)

TOTAL FOR SECTION B = 60 MARKS
TOTAL FOR PAPER = 100 MARKS

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