

Surname	Centre Number	Candidate Number
First name(s)		0



GCSE
3540U10-1



TUESDAY, 11 JUNE 2024 – MORNING

DIGITAL TECHNOLOGY – Unit 1
The Digital World
Paper version of on-screen assessment
1 hour 30 minutes

For Examiner's use only		
Question	Maximum Mark	Mark Awarded
1.	11	
2.	5	
3.	3	
4.	6	
5.	7	
6.	6	
7.	10	
8.	12	
9.	8	
10.	12	
Total	80	

INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen. Do not use gel pen or correction fluid.

Write your name, centre number and candidate number in the spaces at the top of this page.

Answer **all** questions.

Write your answers in the spaces provided in this booklet. If you run out of space, use the additional page(s) at the back of the booklet, taking care to number the question(s) correctly.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets at the end of each question or part-question.
You are reminded of the necessity for good English and orderly presentation in your answers.



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Answer **all** questions.

1. There are many ways to store data digitally.

(a) (i) Tick (✓) the correct boxes to show the most suitable storage medium. [3]

Use	Optical	Cloud	Magnetic
This storage medium can be used to transfer media to a PC.	☐	☐	☐
This would allow a user to back-up a large amount of data.	☐	☐	☐
This allows a user to retrieve their work from any device that has Internet access.	☐	☐	☐

(ii) Describe **one** disadvantage of using a hard disk drive (HDD) in a laptop compared to a solid state drive (SSD). [2]

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(b) (i) State which image type uses pixels. [1]

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(ii) State what would be the impact of storing an image at a low resolution, for example 20 DPI rather than 72 DPI. [1]

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- (c) (i) Tick (✓) the correct boxes to show which of the following are a movie file extension. [2]

File extension	
.JPG	☐
.MOV	☐
.MP3	☐
.BMP	☐
.WMV	☐

- (ii) Describe the difference between a user downloading a movie and streaming a movie on their digital device. [2]

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2. There are many ways to interact with digital devices.

(a) State **one** digital device that uses voice interaction. [1]

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(b) (i) Describe how gesture interaction can be used in gaming. [2]

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(ii) Identify **one** advantage and **one** disadvantage of gesture interaction in gaming. [2]

Advantage:

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Disadvantage:

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3. Changing working practices have had a big impact on society.

(a) State what is meant by the digital divide. [1]

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(b) One factor of the digital divide is the economic factor. Describe how this can have an effect on society. [2]

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4. The Internet is used by millions of people across the world.

(a) State what the acronym URL stands for. [1]

U R L

(b) State what is meant by the Internet. [1]

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(c) Describe the role of an Internet Service Provider (ISP). [2]

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(d) Describe how a web server works. [2]

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5. All companies need to abide by current UK legislation when working with digital devices, data and electronic communications.

(a) (i) State **two** principles of the Data Protection Act 2018. [2]

Principle 1:

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Principle 2:

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(ii) State **one** penalty of breaching the Data Protection Act 2018. [1]

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(b) State **two** crimes that the Computer Misuse Act 1990 covers. [2]

Crime 1:

Crime 2:

(c) Describe what is covered by the Investigatory Powers Act 2016. [2]

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6. The Parkwood Vale Insurance Company use cloud storage to store their data. Other than being able to access cloud services from any device that has access to the Internet, explain the advantages and disadvantages of using cloud storage. [6]



7. Saul owns a surf school based in West Wales and has decided to invest in some new digital systems for his company.

- (a) Explain **two** benefits of how he can use digital devices to promote and improve the performance of his business. Use examples. [6]

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- (b) The surf school is a Business to Consumer (B2C) company and their website allows customers to book surf lessons online. Identify advantages and disadvantages of B2C to the customer and the company. [4]

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8. Samiyah has decided to try to promote her jewellery making business using social media.

- (a) Explain **two** different types of popular social media platforms that could be used to promote Samiyah's jewellery making business and how their unique features can be used to promote her business.

[6]

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- (b) Explain the benefits and drawbacks to Samiyah of using social media platforms for self-promotion and influencing.

[6]

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- Explain, giving examples, the advantages and disadvantages of using autonomous robots in a distribution centre. [8]



- You will need to use the systems development life cycle to plan this project. The System Investigation and System Analysis stages have already been completed and the new system has been given the go-ahead. Explain, including examples, the next steps that could take place at each remaining stage. [QWC 12]

[QWC 12]

[illegible]

[illegible]

[illegible]

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