



**GCE AS/A LEVEL**

**2540U10-1**

**MONDAY, 3 JUNE 2024 – MORNING**

**DIGITAL TECHNOLOGY – AS unit 1**

**Innovation in Digital Technology**

**Paper version of on-screen assessment**

**2 hours plus your additional time allowance**

**Surname** \_\_\_\_\_

**First name(s)** \_\_\_\_\_

**Centre Number** \_\_\_\_\_

**Candidate Number** 2 \_\_\_\_\_

**INSTRUCTIONS TO CANDIDATES**

**Use black ink, black ball-point pen or your usual method.**

**Write your name, centre number and candidate number in the spaces provided on the front cover.**

**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.**

**(Turn over)**

**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.**

**Answer ALL questions.**

- 1. Rob is starting a company and will need the employees to sit in front of a desktop PC for up to 7 hours a day.**
  - (a) Advise Rob on the health risks that can arise from sitting in front of a computer for long periods of time and how these issues can be mitigated. [6 marks]**

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**(Turn over)**





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**3 (b) Describe supervised, semi-supervised, and unsupervised learning within the context of Machine Learning. [6 marks]**

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**6. Cari's company is looking to update its booking system and is considering different development methodologies.**

**(a) Explain Waterfall and Big Bang methodologies, and how their advantages and disadvantages make them suitable for the company.**

**[6 marks]**

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**(Turn over)**





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