|  |
| --- |
| **1.6 The evolution of: industrial and autonomous robotics, autonomous vehicles, virtual and augmented reality, artificial intelligence and machine learning and internet-enabled hardware** |
| * Learners should be aware of the main impacts on society, the economy and culture of the following developments in digital technology that have evolved over time:   + industrial robots   + autonomous robots   + autonomous vehicles   + virtual reality   + augmented reality   + Artificial Intelligence (AI)   + machine learning   + internet-enabled hardware including the Internet of Things (IOT). |

Specification points:

Skills audit:

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria** |  |  |  |
| I can identify the benefits and drawbacks of using autonomous vehicles. |  |  |  |
| I can identify the benefits and drawbacks of using computer-controlled technology such as robots. |  |  |  |

Teacher feedback:

|  |
| --- |
|  |

Student response:

|  |
| --- |
|  |

**Exam-style questions**

1. Artificial Intelligence (AI) is changing the way technology is used. There is a greater demand for autonomous technology such as self-driving cars and robots.
2. Identify **two** advantages and **two** disadvantages to using self-driving cars.

Advantages:

1…………………………………………………………………………………………………………………..

2…………………………………………………………………………………………………………………..

Disadvantages:

1…………………………………………………………………………………………………………………..

2…………………………………………………………………………………………………………………..

**[4]**

1. Identify **two** advantages and **two** disadvantages to using robots for manufacturing purposes.

Advantages:

1…………………………………………………………………………………………………………………..

2…………………………………………………………………………………………………………………..

Disadvantages:

1…………………………………………………………………………………………………………………..

2…………………………………………………………………………………………………………………..

**[4]**