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Information technology in a global society
Higher level
Paper 3

Monday 18 November 2019 (morning)

Candidate session number

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1 hour 15 minutes

Instructions to candidates

- Write your session number in the boxes above.
- Do not open this examination paper until instructed to do so.
- Read the case study carefully.
- Answer all questions.
- Answers must be written within the answer boxes provided.
- The maximum mark for this examination paper is **[30 marks]**.



Answer **all** questions. Answers must be written within the answer boxes provided.

Refer to the *On the road to driverless cars* case study **and** to your own related research in responding to the following questions.

1. (a) Identify **two** factors that could make the sensors in driverless cars become unreliable. [2]

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- (b) Driverless cars at level 5 on the Society of Automotive Engineers (SAE) scale could be designed so that they do not have a steering wheel.

Outline **one** reason why the World Driverless Vehicle Federation (WDVF) would want a level 5 driverless car to have a steering wheel. [2]

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2. (a) Explain how radar sensors inform the driverless vehicle of the conditions in its surrounding area. [2]

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- (b) Explain why latency is an issue for driverless vehicles. [4]

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08EP03

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08EP05

Turn over

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08EP08